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Castillo-Eito, L., Armitage, C.J., Norman, P. et al. (2020) How can adolescent aggression be reduced? A multi-level meta-analysis. Clinical Psychology Review, 78. 101853. ISSN: 0272-7358

https://doi.org/10.1016/j.cpr.2020.101853

How can adolescent aggression be reduced? A multi-level meta-analysis

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Declarations of interest: none

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Abstract

Aggressive behaviour among adolescents has significant social and economic costs. Numerous attempts have been made to intervene to reduce aggression in adolescents. However, little is known about what factors enhance or diminish intervention effectiveness. The present systematic review and meta-analysis, therefore, seeks to quantify the effectiveness of interventions to reduce aggressive behaviour in adolescents and to identify when and for whom such interventions work best. Sixteen databases were searched for randomised controlled trials that assessed interventions to reduce aggression among adolescents. After screening 9795 records, 95 studies were included. A multi-level meta-analysis found a significant overall small-to-medium effect size (d = 0.28; 95% CI [0.17, 0.39]). More effective interventions were of shorter duration, were conducted in the Middle East, were targeted at adolescents with higher levels of risk, and were facilitated by intervention professionals. Potentially active ingredients were classified using the Behaviour Change Technique Taxonomy. *Behavioural practice* and *problem solving* were components of more effective interventions targeted at the general population. Overall the findings indicate that psychosocial interventions are effective in reducing adolescent aggression. Future trials need to assess the effect of individual techniques and their combination to identify the key components that can reduce aggression in adolescents.

Keywords: aggression, adolescence, Behavior Change Technique, multi-level meta-analysis.

How can adolescent aggression be reduced? A multi-level meta-analysis

Aggression among adolescents is a worldwide problem. For example, Craig et al. (2009) found that bullying is common in 40 countries across Europe and America. In the United States, Lynne-Landsman, Graber, Nichols, and Botvin (2011) found aggression increases through adolescence, with 51% of their sample presenting high levels of aggressive behaviour at the end of middle school. Aggressive behaviours during adolescence are associated with negative immediate and long-term outcomes for both victims and perpetrators. For example, victims of bullying have more mental health problems during adulthood than those who have not been bullied (Arsenault, 2017) and adolescents who display aggression are more likely to have drug problems, present depressive symptoms and be arrested as an adult (Hyde, Burt, Shaw, Donnellan, & Forbes, 2015; Rhoades, Leve, Eddy, & Chamberlain, 2016). In the US alone, the annual cost of serious aggression among adolescents is over $21 billion (National Center for Injury Prevention and Control (U.S.). Division of Violence Prevention, 2019).

Many interventions have been developed to prevent and reduce aggressive behaviour in adolescents. Previous reviews have concluded that these interventions are effective (see Appendix A for an overview of 38 previous systematic reviews and meta-analyses including adolescents). However, it is still not clear which specific characteristics and techniques included in these interventions are most effective among adolescents. Only six of these reviews have investigated what works specifically in adolescents: two meta-analyses and four systematic reviews. The meta-analyses have focused on specific interventions involving sports participation (Spruit, Assink, van Vugt, van der Put, & Stams, 2016) and positive youth development (Melendez-Torres et al., 2016), and although the systematic reviews included a broader range of interventions, they did not quantify their effects (Cox et al., 2016;

Gavine, Donnelly, & Williams, 2016; Kelly, 2017; Limbos et al., 2007). Therefore, a meta-analysis that identifies what works to reduce aggression in adolescents is currently unavailable.

Despite the limitations of the previous systematic reviews, some have suggested that interventions aimed at those at greater risk of perpetrating aggression (i.e., targeted interventions) may be more effective than interventions aimed at the general adolescent population (i.e., universal interventions; Gavine et al., 2016; Limbos et al., 2007). The mechanisms underlying effectiveness in universal and targeted interventions might also be different and many reviews focused solely on universal or targeted interventions (see Appendix A). This is important because numerous reviews have concluded that behaviour training and social skills training are the most effective components of interventions that are targeted rather than universal (Fossum, Handegård, Martinussen, & Mørch, 2008; Molina, Dulmus, & Sowers, 2005; Mytton, DiGuiseppi, Gough, Taylor, & Logan, 2006; Özabacı, 2011; Wilson & Lipsey, 2007). Identifying which intervention components are effective in improving behaviour is valuable in guiding intervention optimisation. However, without a common language, it is difficult to describe and compare intervention components. For example, Wilson and Lipsey (2007) defined "behavioural strategies" as giving rewards and incentives, whereas Özabaci (2011) characterised learning and practising behavioural responses as "behavioural strategies". This limitation can be overcome by using a common framework or taxonomy. The present meta-analysis will use the Behaviour Change Technique (BCT) taxonomy version 1 (Michie et al., 2013) to identify the BCTs included in interventions and test which are effective in reducing aggression among adolescents. We will also test whether BCT effectiveness differs between universal and targeted interventions. The BCT taxonomy has been widely used to analyse interventions addressing many health behaviours such as diabetes care (Presseau et al., 2015) and physical activity (Cradock et al.,

2017). The taxonomy includes 93 techniques such as *feedback on behaviour*, *problem solving* and *adding objects to the environment* that aim to change behaviour.

Duration is another characteristic that previous reviews focusing on adolescents have found as a significant moderator of effectiveness. Limbos et al. (2007) suggested in their systematic review that interventions that lasted 12 months or more were more likely to be effective than shorter interventions. However, other reviews have found that longer interventions are not more effective than shorter ones (Fagan & Catalano, 2013).

Systematic reviews and meta-analyses of interventions to reduce aggressive behaviour across children, adolescents and adults have suggested that the existence of other factors in addition to targeting and duration that might moderate intervention effectiveness. However, they have not considered adolescents as a group separate from children and/or adults. Therefore, there is a need to investigate whether these factors moderate the effect of interventions in adolescents as it is possible that interventions need to be specifically tailored for this target group (Yeager, Dahl, & Dweck, 2018).

One of the factors that might moderate the effectiveness of interventions to reduce aggression in adolescents is whether intervention is delivered individually or to a group. Group interventions have been found to be less effective with samples containing high proportions of boys (Sawyer, Borduin, & Dopp, 2015) and targeted interventions to be more effective when delivered individually than to a group (Smedler, Hjern, Wiklund, Anttila, & Pettersson, 2015; Wilson & Lipsey, 2007). The person delivering the intervention has also been found to moderate intervention effectiveness. For example, interventions delivered by a member of the research team were more effective than those delivered by mental health professionals in Sawyer et al.'s (2015) meta-analysis, and interventions delivered by intervention specialists were more effective than those delivered by teachers in Park-

Higgerson, Perumean-Chaney, Bartolucci, Grimley, and Singh (2008)'s quantitative review. School-based interventions have been found to be more effective in high school than in middle school (Hahn et al., 2007) and to be associated with the amount of training the teachers received (Ttofi & Farrington, 2011). The size of the effect of interventions to reduce aggressive behaviours has also been found to vary depending on how the outcome is assessed. For example, both Grove, Evans, Pastor, and Mack's (2008) and Sawyer et al.'s (2015) meta-analyses found that the reduction in aggressive behaviour was more pronounced when the outcome was measured via official records. In the former, that effect was significantly larger than the effect found for self-reports, and in the latter, it was significantly larger than the effect when the outcome was assessed via parent reports. Finally, Ttofi and Farrington (2011) found that anti-bullying school-based interventions evaluated before 2003 were more effective than those evaluated more recently, and interventions implemented in Norway were more effective than those implemented elsewhere. These findings suggest that children from different cultures may vary in the extent to which they engage with interventions to reduce aggressive behaviour and that they may have become less receptive of such interventions over time. In terms of informing our study, these findings indicate that it is important to test whether date of publication and geographical location also moderate the effectiveness of interventions.

Previous studies of the effectiveness of interventions for aggression have used traditional meta-analysis, which is limited by the assumption of independence of effect sizes that prevents more than one effect size from being included from each study. The present study applies a multi-level meta-analysis, which relaxes that assumption. Multi-level meta-analysis allows all effect sizes from studies that report multiple comparisons to be included as the modelling accounts for the dependence of effect sizes nested within studies (Assink & Wibbelink, 2016). Thus, information is maximized and analysis power improved.

In the present study, we aim to identify what works for whom in the reduction of aggressive behaviour. In order to do this, we classify components of the interventions using the BCT taxonomy and test which BCTs are most effective for universal and for targeted interventions separately. In addition, we examine the moderators of intervention effectiveness highlighted in this introduction with the objective of confirming their moderation effect in interventions with adolescents. The moderators that will be examined include characteristics of the intervention such as duration, characteristics of the participants such as gender and aspects of the study design such as outcome informant.

Method

The systematic review protocol was registered on PROSPERO (http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018088811).

Search Strategy

A database search was undertaken in January 2019 to identify all Randomised Controlled Trials (RCTs) published up to the end of 2018. Only RCTs were included as they provide the best design to assess intervention effectiveness (Higgins & Green, 2011). Searches were conducted on Web of Science, namely, Web of Science Core Collection, BIOSIS Citation Index, BIOSIS Preview, Current Contents Connect, Data Citation Index, Derwent Innovations Index, Journal and Highly Cited Data, KCI-Korean Journal Database, MEDLINE, Russian Science Citation Index, SciELO, and Zoological Record, as well as in the databases Scopus and PsycINFO. Titles, abstracts and author keywords were searched for four key concepts: (a) adolescents (youth, adolescent, teenager, juvenile, young, minor), (b) intervention (behaviour change, intervention, prevention, experiment, program, reduction, evaluation, strategy, effect, trial), (c) RCT (RCT, Cluster RCT, Group RCT, randomised controlled trial); and (d) aggression (bullying, violence, aggression, physical assault, fighting). The search was limited to articles in English and Spanish, as they were the

languages in which the first author was fluent. The specific search was amended as necessary for each database to account for different search functionalities. In order to account for publication bias, efforts were made to locate grey literature. With that purpose, a similar search was carried out in Open Grey and Proquest Dissertations and Theses.

To ensure all relevant studies were identified, reference lists of relevant systematic reviews were also searched (see Appendix A). In addition, once the relevant studies from both database searches and previous reviews were identified, reference lists –i.e., backward search– and citations –i.e., forward search– were searched for each article retrieved. Forward searches were undertaken with Google Scholar to retrieve unpublished studies and studies that were not listed in the previously mentioned databases. The study selection flow diagram shown in Figure 1 shows the number of articles retrieved from both databases and additional resources and the number of records after duplicates were removed.

Study Selection

Studies were included if they met the following five inclusion criteria: (a) the study design was a RCT or a cluster RCT; (b) the mean age of the participants at baseline was between 10 and 17.99 years old or, if the mean was not reported, the range of ages fell within those limits; (c) the intervention was mainly addressed to the adolescent rather than to the parent or another agent; (d) there was at least one comparison group that was a non-treatment, waiting list, treatment as usual or attention control group; and (e) one of the reported outcomes was a behavioural measure of actual or threatened physical aggression against peers, such as fighting, weapon carrying or bullying.

Studies were excluded if participants were selected due to a specific diagnosis such as Autistic Spectrum Disorder or Attention Deficit Hyperactivity Disorder. However, if the participants were selected due to a diagnosis of Conduct Disorder or Oppositional Defiant

Disorder, the study was still included, as aggressive behaviour is an inherent part of those disorders. Studies were also excluded if the intervention included psychopharmacology and if the comparison group received a competing intervention as opposed to treatment as usual.

First, titles and abstracts of all the records found in the databases, grey literature and previous reviews (n = 3826) were screened for inclusion by the first author. Full-texts were obtained when possible and screened by the first author for all the records that appeared to meet the inclusion criteria (n = 380). If the full-text could not be found, manuscripts were requested from authors. A second reviewer screened a randomly-selected sample of 10% of the articles (n = 38). There was good interrater agreement on study inclusion (Cohen's Kappa = 0.79) with disagreements (n = 3) resolved through discussion. Sixty-six studies identified from the initial searches were included. Reference lists and citations of those 66 studies were searched to identify further relevant studies. Screening of the records identified through backward and forward reference searching was undertaken by the first author (n = 5969). The flow diagram in Figure 1 shows the number of records included and excluded with reasons for exclusion after the backward and forward reference searches were conducted. A complete list of studies excluded at the full-text stage with reasons for exclusion can be found in Appendix B.

Appraisal of Study Quality

The Cochrane Risk of Bias Tool (Higgins & Green, 2011) was used to assess study quality. The tool grades studies as high, low or unclear risk across the following domains: selection bias (random sequence generation and allocation concealment), performance bias, detection bias, attrition bias, reporting bias and other bias.

The first author assessed the quality of all included studies (n = 95). A second reviewer assessed a random sample of 10% of the studies (n = 10). The interrater agreement

was poor (Cohen's Kappa = 0.50). After discussion, all disagreements were resolved. A summary of the risk of bias judgements can be found in Figure 2.

Data Extraction

Data to calculate Cohen's d was extracted from each study. We used reported effect sizes (ES) where these were quoted (43% of included ES). If a measure of effect size different to Cohen's d was reported, such as r, it was converted using Decoster's (2012) calculator (25% of ES). For studies with continuous outcomes that did not report effect sizes, means and standard deviations (or standard errors if standard deviations were not reported) from baseline and follow-up were extracted (43% of ES) and Morris' (2008) formula was used to calculate Cohen's d. For binary outcomes, percentages or number of events were extracted for baseline and follow-up (6% of ES), Odds Ratio were calculated using Higgins and Green's (2011) formula and then transformed to Cohen´s d. Authors were contacted when neither effect size nor descriptive statistics were reported (n = 30). For the studies whose authors did not reply (n = 15) or replied but did not send the data requested (n = 10), effect sizes were calculated from inferential statistics if sufficient data were available (8% of ES) using Wilson's (2001) calculator. The remaining studies were excluded from the analysis (n = 17). The data extracted from 10% of the studies were checked by a second reviewer with 100% agreement. Multiple effect sizes were obtained from the same study in papers where (a) several outcomes meeting the inclusion criteria were reported, (b) there was more than one intervention group, (c) analyses for different subsamples were reported or (d) there was more than one follow-up.

Study characteristics (e.g., country), design (e.g., RCT or CRCT), participants' characteristics (e.g., age), intervention characteristics (e.g., BCTs) and outcomes (e.g., used measurement) were extracted from all the included studies (n = 95). Behaviour change techniques were coded using version 1 of Michie, Atkins, and West's (2014) taxonomy and

extracted from the description of the intervention in each paper by the first author, who had undertaken the BCT Taxonomy Online Training (www.bct-taxonomy.com). Other papers reporting the same study or using the same intervention were searched to complete information about the intervention when required. If the description was unclear or a manual was cited but could not be retrieved, further information was requested from authors. If treatment as usual or attention control groups were used, BCTs were extracted from each group when possible. The BCTs that were applied in both the intervention group and the control group were not used in the analysis as they could not contribute to variance between the groups. A second reviewer coded the BCTs from a random sample of 15% of the studies. There were disagreements on 18 BCTs. Disagreements were discussed and when an agreement could not be reached, a third reviewer was consulted. The rest of the studies were coded by the first author following the principles developed during the interrater discussion.

Analysis

To account for the likely correlation between effect sizes extracted from the same study, a three-level random-effects meta-analysis was performed using the metafor package (Viechtbauer, 2010) for the R environment (R Core Team, 2019) following Assink and Wibbelink's (2016) guidelines (database and code used can be found in Supplementary material). A three-level model accounts for: sampling variance (level 1), variance between effect sizes from the same study (level 2) and variance between studies (level 3). If there was evidence for heterogeneity at level 2 or level 3, moderator analyses were conducted to investigate it. Following Weisz et al. (2017), analyses with categorical moderators were only conducted if each category contained at least five cases as parameters are poorly estimated by limited data.

Sensitivity analyses were used to examine the effect of outliers and risk of bias. Therefore, analyses including and excluding outliers 3 standard deviations (SD) from the

overall effect size and analysis excluding and including studies with a high risk of bias were conducted.

Sampling variance was calculated using Meta-essentials (Suurmond, van Rhee, & Hak, 2017). In order to adjust the CRCT sample sizes, the design effect was calculated using the Intra-Cluster Correlation (ICC) reported in the study as described by Higgins and Green (2011). If ICC was not reported, the ICC was taken from another study that used similar clusters (school vs. classrooms) and outcomes (e.g. self-report, parent-report). Then, the sample size was adjusted using the design effect. In studies with several intervention groups but only one control group, the sample size of the control group was divided by the number of intervention groups. If there were several types of control groups, the non-treatment control group was given preference.

Results

Characteristics of included studies

One hundred and twelve studies met the inclusion criteria of which 95 provided sufficient data to calculate effect sizes allowing inclusion in the analysis. These studies were reported in English between 1979 and 2018. Ninety-one per cent were published (87% in academic journals and 3% in books), while the rest were unpublished (8% were dissertations and one record was an institutional report). All included studies comprised 111,151 young people (53,409 in control groups and 57,742 in intervention groups) with a mean age of 13.36 and 60% male on average. Fifty-four per cent of the studies were cluster RCTs. The trials were conducted in 20 different countries across all continents most commonly the United States (54%). The interventions varied in duration from 20 minutes to 3 years, 79% of them were delivered in schools and 84% were group interventions. Fifty-four per cent of the interventions were delivered to young people with aggressive behaviours or with risk factors

for aggression (targeted interventions) and 46% were delivered to the whole population regardless of risk (universal interventions). Appendix C summarises the characteristics of each study.

Overall study quality was judged as low. Eighty-two per cent of the studies had at least one domain that was assessed as high risk of bias and 98% of the studies did not report enough information to assess all bias risk domains. The risk of bias assessment summary can be found in Figure 2.

Impact of interventions on aggressive behaviour

The 95 included studies produced 283 effect sizes from 115 intervention groups. The overall mean effect size was $d = 0.28$, 95% Confidence Interval (CI) [0.17, 0.39], indicating that psychosocial interventions reduced aggression compared to a control group, with a small-to-medium effect size overall, according to Cohen's (1992) conventions.

There was significant heterogeneity between effect sizes within studies ($\chi 2$ (1) = 5597.39, $p < .001$) and between studies ($\chi 2$ (1) = 134.69, $p < .001$). Thus, 0.20% of total variance can be attributed to sampling variance, 8.64% to variance within studies and 91.17% to variance between studies.

A sensitivity analysis was conducted excluding effect sizes that were three SD over or below the mean effect size ($k = 9$). This analysis included 274 effect sizes from 94 studies. The overall effect size was still small but significant ($d = 0.21$, 95% CI [0.14, 0.27]) and heterogeneity was still significant both within ($\chi 2$ (1) = 5499.86, $p < .001$) and between studies ($\chi 2$ (1) =103.00 $p < .001$). The outliers accounted for some variance between studies as, after removing the outliers, 0.62% of the variance was attributed to sampling variance, 14.07% to variance within studies and 85.30% to variance between studies. Inspection of the outliers showed that they did not share any specific characteristics. Therefore, outliers were

preserved in the main analyses, although all the analyses were also conducted excluding the outliers to control for influential cases (see Appendix D for complete results), as suggested by Viechtbauer and Cheung (2010). These analyses produced substantively similar results.

In addition, a sensitivity analysis was conducted excluding studies with a high risk of bias in three or more domains (n = 13). This analysis included 233 effect sizes from 82 studies. The overall effect size was marginally larger than including all the studies (d = 0.31, 95% CI [0.17, 0.44]). As there was not a substantial difference, the studies with a high risk of bias were kept for the rest of the analyses.

Moderator analyses

In order to explore heterogeneity, moderator analyses (Table 1) were conducted to identify possible intervention, outcome, sample and methodological characteristics that influence intervention effectiveness. At the study level, there was only one significant moderator: geographical location. Studies conducted in the Middle East were significantly more effective than studies conducted in Europe and the United States.

At the intervention level, four significant moderators were found (Table 1). Studies were grouped according to whether the intervention was addressed to the full population regardless of the level of risk of aggression (universal) or targeted to specific adolescents presenting aggressive behaviour or risk factors for aggression (targeted). Targeted interventions had a significantly larger effect size than universal interventions. Interventions delivered by a teacher or member of staff were significantly less effective than interventions delivered by an intervention professional such as a psychologist or a social worker. Interventions were coded according to which kind of specific training the facilitators received. There may be (a) no training, (b) an intervention manual or a detailed description of each session, (c) specific training, or (d) specific training with periodic supervision from a member of the research

Table 1

Results of moderator analysis based on 283 Effect Sizes from 95 studies containing 115 intervention groups.

Moderator variables	#studies/IG[a]	#ES	*d*[b] (95% CI)	Omnibus test	p-value	Variance level 2[c]	Variance level 3[d]
Study level							
RCT vs CRCT				F (1,272) = 1.36	.245	0.026	0.262
RCT	44	100	0.35 (0.18, 0.53)***				
CRCT	51	174	0.22 (0.07, 0.37)**				
Publication year (in years)	95	274	0.001 (-0.01, 0.01)	F(1,272) = 0.02	.898	0.026	0.267
Follow-up (in months)	95	274	-0.003 (-0.01, 0.004)	F(1,272) = 0.61	.436	0.026	0.257
Outcome				F(4,244) = 2.14	.076	0.030	0.272
General aggression	57	75	0.40 (0.25, 0.55)***				
Physical aggression	59	97	0.20 (0.06, 0.34)**				
Bullying	15	44	0.24 (0.08, 0.41)**				
Weapon carrying	9	22	0.17 (-0.02, 0.35)				
Fighting	7	11	0.25 (0.01, 0.48)*				
Informant of outcome				F(2,250) = 1.11	.331	0.029	0.280
Self-report	74	212	0.27 (0.14, 0.40)***				
Teacher report	16	29	0.42 (0.21, 0.63)***				
Observation	7	12	0.37 (-0.15, 0.88)				
Continent				F(2,234) = 12.65	< .001***	0.031	0.209
North America	53	141	0.14 (-0.003, 0.28)				
Europe	23	62	0.21 (0.01, 0.42)*				
Middle East	9	34	1.15 (0.78, 1.52)***				
Intervention level							
Target				F (1,272) = 6.76	.010*	0.026	0.244

Universal	52	142	0.16 (0.02, 0.30) *				
Targeted	63	132	0.39 (0.25, 0.53) ***				
Setting				F(4,252) = 1.96	.100	0.024	0.267
Mainstream school	82	203	0.29 (0.15, 0.42)***				
Alternative school	6	15	0.46 (-0.05, 0.97)				
Psychiatric institution	8	14	-0.18 (-0.61, 0.25)				
Juvenile correctional	6	12	0.68 (0.18, 1.19)**				
Hospital	6	13	0.10 (-0.38, 0.59)				
Facilitator				F(3,232) = 10.76	< .001***	0.006	0.202
Research team	13	31	0.37 (0.07, 0.67)*				
Professional	40	111	0.36 (0.23, 0.49)***				
Teacher	29	77	0.03 (-0.11, 0.17)				
University student	7	16	0.20 (-0.13, 0.52)				
Training				F(3,267) = 3.82	.011*	0.026	0.244
No training	21	36	0.69 (0.40, 0.98)***				
Only manual	15	27	0.33 (0.09, 0.58)**				
Specific training	29	66	0.21 (-0.002, 0.42)				
Training + supervision	48	142	0.16 (0.00, 0.32)*				
Age (mean, in years)	92	268	-0.007 (-0.05, 0.03)	F(1,266) = 0.12	.731	0.027	0.276
Gender (proportion male)	89	258	-0.09 (-0.19, 0.01)	F(1,256) = 2.92	.089	0.026	0.193
Ethnic minority (proportion)	60	174	-0.12 (-0.33, 0.09)	F(1,172) = 1.23	.268	0.037	0.042
SES (proportion low SES)	22	90	0.09 (-0.43, 0.60)	F(1,88) = 0.11	.738	0.041	0.044
Duration (in weeks)	94	272	-0.007 (-0.01, -0.002)**	F(1,270) = 9.06	.003**	0.027	0.229
Contact hours	83	247	-0.003 (-0.01, 0.001)	F(1,245) = 2.44	.120	0.013	0.301
Intensity (hours per week)	83	247	-0.02 (-0.12, 0.09)	F(1,245) = 0.08	.772	0.013	0.319
Group vs individual				F(1,262) = 0.68	.411	0.023	0.284

Group intervention	96	235	0.31 (0.18, 0.44)***				
Individual intervention	15	35	0.16 (-0.15, 0.48)				
Focus				F(6,252) = 0.96	.456	0.026	0.305
Peer aggression	49	134	0.35 (0.17, 0.53) ***				
Anger	9	21	0.54 (0.11, 0.98) *				
Socioemotional development	15	24	0.04 (-0.27, 0.35)				
Drug use	10	41	0.06 (-0.37, 0.48)				
Internalising disorders	6	14	0.22 (-0.30, 0.73)				
Problem behaviours	10	18	0.15 (-0.22, 0.51)				
Cyberbullying	5	7	0.30 (-0.28, 0.88)				

Note. # studies/IG = number of independent studies/intervention groups; # ES = number of effect sizes; d = mean effect size; CI = confidence interval, RCT = Randomised controlled trial, CRCT = Cluster randomised controlled trial, SES = Socioeconomic status

[a] For study level moderators, the number of studies is reported, for intervention level moderators, number of intervention groups is reported. [b] For categorical predictors, ES is Cohen's d for each category. For continuous predictors, ES is β for that specific predictor. [c] Variance between the effect sizes from the same study. [d] Variance between studies.

*p < .05; **p < .01; ***p < .001.

team or a specialist in the intervention. Interventions where no training was reported were significantly more effective than interventions with specific training with or without supervision. Duration of the intervention was also a significant moderator; shorter interventions were more effective.

Behaviour Change Techniques

After accounting for the BCTs present in control groups, interventions included between 0 and 22 BCTs (M = 8.05). Sixty-eight different BCTs were present. Appendix C shows the BCTs coded for each specific intervention. The most common BCTs were *Behavioural practice*, *Problem solving* and *Information about social and environmental consequences*, present in 86 (74%), 57 (49%) and 56 (48%) intervention groups respectively.

Given that we found targeted interventions to be more effective than universal and that previous literature has often treated these approaches separately (Fossum et al., 2008; Wilson & Lipsey, 2007), we compared BCT effectiveness separately in universal and targeted interventions. Meta-regression and subgroup analyses were conducted for all the BCTs that were included in at least five intervention groups.

Universal interventions

Forty-five studies reported universal interventions, providing 151 effect sizes from 52 intervention groups. Fifty-three BCTs were identified in total and only 29 were included in 5 or more intervention groups; between 1 and 22 BCTs (M = 7.53) were used in each intervention. The most common BCTs were *Behavioural practice* (k = 38), *Information about social and emotional consequences* (k = 28), *Problem solving* (k = 25) and *Instruction on how to perform the behaviour* (k = 25).

Number of BCTs included was not a significant moderator of intervention effectiveness (F (1,140) = 0.33, p = .568). A meta regression including the BCTs that were

reported in more than 5 intervention groups was conducted. The model was not significant (F (29,112) = 0.98, p = .499). Subgroup analyses were conducted for each of these 29 BCTs comparing interventions where the BCT was present to interventions where the BCT was absent. The results indicated that interventions that included *Behavioural practice* (d = 0.16) or *Problem solving* (d = 0.20) were more effective than interventions that did not include them (*Behavioural practice*: d = -0.04; t = 2.42, p = .017; *Problem solving*: d = 0.03; t = 2.03, p = .044). Complete results are shown in Appendix E.

Targeted interventions

There were 64 targeted interventions within 52 studies. They reported a total of 132 effect sizes. The 64 targeted intervention groups reported a total of 69 different BCTs. Each intervention reported between 0 and 22 BCTs (M = 8.38). The most common BCTs were *Behavioural practice* (k = 48), *Problem solving* (k = 32) and *Instruction on how to perform the behaviour* (k = 30).

The number of BCTs included did not predict intervention effectiveness (F (1,130) = 0.62, p = .434). A meta-regression was conducted including the 28 BCTs which were reported in 5 or more interventions. The moderator effect was not significant (F (28,103) = 0.88, p = .640). Subgroup analyses conducted for each BCT were non-significant. Complete results are reported in Appendix F.

Discussion

The present multilevel meta-analysis assessed whether psychosocial interventions were effective in reducing aggression among adolescents and attempted to identify which characteristics of the study, the intervention and the adolescents moderated intervention effectiveness. Across all psychosocial interventions included in the review, we found a statistically significant small-to-medium overall effect size of 0.28. This corresponds to a

10% decrease in aggressive behaviour in contrast with a control group (Coe, 2002). This effect size is consistent with previous meta-analyses addressing aggression across children and adolescents. Effect sizes found in previous reviews ranged from 0.09 for school-based interventions (Park-Higgerson et al., 2008) to 0.68 for creative bibliotherapy (Montgomery & Maunders, 2015).

We found that level of risk at baseline was a significant moderator confirming, with quantitative analysis, the findings from previous systematic reviews (Gavine et al., 2016; Limbos et al., 2007). Interventions were more effective when targeted to adolescents with a higher risk of being aggressive than when they are administered to a general adolescent population. One possible explanation for this result is that antisocial behaviour is relatively rare in the general population. Many participants in universal interventions may show limited aggressive behaviours and, therefore, have little scope for change.

In the present study, shorter interventions were found to be more effective than longer interventions. This finding is consistent with Fagan and Catalano's (2013) systematic review. However, Limbos et al.'s (2007) systematic review concluded that targeted interventions that were longer than a year were more effective than those that were shorter. Limbos et al. (2007) compared interventions shorter and longer than a year on the basis of whether they reported effectiveness, instead of calculating effect sizes. One of the strengths of our study is using multi-level meta-analysis in order to use all reported effect sizes in each study, rather than an overall conclusion, which makes our findings more robust. Future research should investigate the minimum duration for an intervention to be effective in order to guide intervention development.

The person who facilitates the intervention was also identified as an important moderator of effectiveness. We found that delivery by intervention professionals was more

effective than delivery by a teacher or member of staff, which is consistent with the findings from previous reviews (Park-Higgerson et al., 2008; Sawyer et al., 2015). It is important to note, however, that interventions delivered by intervention professionals were mostly targeted interventions, while interventions delivered by teachers were mostly universal interventions. This fact might explain this finding as targeted interventions were found to be more effective than universal interventions. We also found that interventions were more effective when facilitators did not receive training. This might seem to contradict the findings from Ttofi and Farrington (2011), who found that for school-based interventions, the more training the teacher received, the more effective the intervention was. However, both of these results could be complementary. It is possible that intervention professionals do not need training to deliver an effective intervention. However, if the intervention is delivered by teachers, they will need a lot of training to deliver an intervention that has the same effect. This interaction of training and facilitator should be investigated in future studies.

Finally, geographical location of the study was also a significant moderator. We found that interventions delivered in the Middle East were more effective than those delivered in Europe or North America. This could be because, in all the studies conducted in the Middle East, the interventions were delivered by a member of the research team or by an intervention professional. In addition, all the interventions evaluated in the Middle East except one (Shechtman & Ifargan, 2009) were targeted interventions. As indicated in our previous moderation analyses, these characteristics are associated with more effective interventions.

We did not find evidence to support the influence on adolescents of other moderators that have been found in previous reviews across children, adolescents and adults, such as age, gender, year of publication, informant of the outcome, and whether the intervention was delivered individually or to a group. It is possible that these characteristics moderate the effectiveness of interventions targeting children and not interventions targeting adolescents.

Although null findings are not equivalent to absence of effect in the population, given the large number of studies included in most of the moderator analyses, it is unlikely that they reflect a lack of statistical power. If future studies confirm that these moderators do indeed have little or no effect with respect to interventions for adolescents, this would have important implications. For example, time to follow-up was not found to moderate intervention effectiveness, suggesting that intervention effects did not diminish over time. This is consistent with the findings of previous reviews (Beelmann & Lösel, 2006; Robinson, Smith, Miller, & Brownell, 1999; Sawyer et al., 2015). However, this conclusion needs to be taken cautiously as in our review the average time to follow-up was 3.65 months. Therefore, effectiveness over longer periods could not be estimated well in this dataset.

This present meta-analysis also aimed to identify which BCTs were effective in reducing aggression and whether those BCTs were different for targeted and universal interventions. For that, we employed the widely-used BCT taxonomy (Michie et al., 2013) to identify individual techniques in interventions reports. We found that both universal and targeted interventions used similar BCTs, namely: *behavioural practice, problem solving, instruction on how to perform the behaviour* and *information about social and emotional consequences*.

Behavioural practice and *problem solving* were effective in reducing aggression in universal interventions. Universal interventions that included either of these techniques were more effective than those which did not include them. This finding has important implications, as this is the first review to identify specific effective techniques in universal interventions. Previous reviews (Scheckner, Rollin, Kaiser-Ulrey, & Wagner, 2002; Wilson & Lipsey, 2007) did not find any particular strategy to be more effective in universal interventions. Thus, the current review indicated that effective universal interventions "prompt practice or rehearsal of the performance of the behaviour" (Michie et al., 2014, p.

270) and "prompt the person to analyse factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators" (Michie et al., 2014, p. 259). It is important to note, however, that all the studies included in this meta-analysis which used *behavioural practice* or *problem solving* included them in combination with at least three other BCTs. Therefore, more research is needed to assess their specific effects both on their own and in combination.

We did not find any BCT that significantly improved the effectiveness of targeted interventions. This was unexpected, as previous reviews have found specific intervention components that are effective for targeted interventions (Fossum et al., 2008; Özabacı, 2011; Wilson & Lipsey, 2007). A possible explanation is that the component analysis in previous reviews was different due to the lack of a taxonomy. Thus, previous reviews extracted components that were comprised of a combination of techniques instead of individual behaviour change techniques. For example, Wilson and Lipsey (2007) found that the most effective component was behavioural strategies, which they defined as "Techniques, such as rewards, token economies, contingency contracts, and the like to modify or reduce inappropriate behaviour" (p. 18). This may suggest that what makes targeted interventions effective is the combination of techniques and not the individual techniques. Future research should investigate these combinations further as has been investigated for other behaviours (Dusseldorp, van Genugten, van Buuren, Verheijden, & van Empelen, 2014).

One of the main limitations of the present review database was the poor reporting of the techniques used in the interventions, which makes extracting BCTs difficult. This issue has been mentioned before by Cradock et al. (2017) in their meta-analysis on diet and physical activity. Despite the efforts made to retrieve complete intervention descriptions from manuals and authors, it is likely that not all the BCTs used in the interventions were coded. This issue makes it difficult to analyse the effect of each BCT separately. If we want to

identify which techniques are more effective, it is important that in the future, the interventions are reported in detail. The BCT taxonomy used in this meta-analysis (Michie et al., 2014) provides a helpful common language to report intervention content. More primary intervention studies are also necessary to identify effective techniques. This should include designing interventions that use only one technique or comparing similar interventions that differ only in one technique. Some of the studies included in this meta-analysis have already attempted this. For example, Etscheidt (1984) delivered the same intervention with and without contingent reinforcement and did not find any differences.

Conclusion

This is the first multilevel meta-analysis on interventions to reduce aggressive behaviour in adolescents and the first to examine the role of individual BCTs. We found that psychosocial interventions are effective in reducing aggression among adolescents, especially when they are targeted to young people at greater risk of being aggressive. We found that shorter interventions were more effective than longer interventions, and interventions delivered by intervention professionals were more effective than those delivered by teachers or staff members. Universal interventions were especially effective if they included *behavioural practice* and *problem solving*. More primary studies are needed to identify the effect of individual BCTs and their combination, especially in targeted interventions.

Acknowledgements

The authors wish to thank Brechtje de Mooji for her assistance on the statistical analysis.

This work was supported by the Department of Psychology at the University of Sheffield, NIHR Manchester Biomedical Research Centre and NIHR Greater Manchester Patient Safety Translational Research Centre.

References

Arsenault, L. (2017). The long-term impact of bullying victimization on mental health. *World Psychiatry*, *16*(1), 27–28. https://doi.org/10.1002/wps.20399

Assink, M., & Wibbelink, C. J. M. (2016). Fitting three-level meta-analytic models in R: A step-by-step tutorial. *The Quantitative Methods for Psychology*, *12*(3), 154–174. https://doi.org/10.20982/tqmp.12.3.p154

Beelmann, A., & Lösel, F. (2006). Child social skills training in developmental crime prevention: Effects on antisocial behavior and social competence. *Psicothema*, *18*(3), 603–610.

Botvin, G. J., Griffin, K. W., & Nichols, T. D. (2006). Preventing Youth Violence and Delinquency through a Universal School-Based Prevention Approach. *Prevention Science*, *7*(4), 403–408. https://doi.org/10.1007/s11121-006-0057-y

Coe, R. (2002, September). *It's the Effect Size Stupid: What effect size is and why it is important*. 18. Exeter.

Cox, E., Leung, R., Baksheev, G., Day, A., Toumbourou, J. W., Miller, P., … Walker, A. (2016). Violence Prevention and Intervention Programmes for Adolescents in Australia: A Systematic Review. *Australian Psychologist*, *51*(3), 206–222. https://doi.org/10.1111/ap.12168

Cradock, K. A., ÓLaighin, G., Finucane, F. M., Gainforth, H. L., Quinlan, L. R., & Ginis, K. A. M. (2017). Behaviour change techniques targeting both diet and physical activity in type 2 diabetes: A systematic review and meta-analysis. *International Journal of Behavioral Nutrition and Physical Activity*, *14*(1), 18. https://doi.org/10.1186/s12966-016-0436-0

Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B., … the HBSC Bullying Writing Group. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, *54*(S2), 216–224. https://doi.org/10.1007/s00038-009-5413-9

DeCoster, J. (2012). *Converting effects sizes*. Retrieved from http://www.stat-help.com/spreadsheets/Converting%20effect%20sizes%202012-06-19.xls

Dusseldorp, E., van Genugten, L., van Buuren, S., Verheijden, M. W., & van Empelen, P. (2014). Combinations of techniques that effectively change health behavior: Evidence from Meta-CART analysis. *Health Psychology*, *33*(12), 1530–1540. https://doi.org/10.1037/hea0000018

Etscheidt, S. L. (1984). *A comparison of cognitive, cognitive-behavioral and behavioral interventions in reducing classroom aggressive behavior* (University of Minnesota). Retrieved from https://www.researchgate.net/publication/36324133_A_comparison_of_cognitive_cognitive-behavioral_and_behavioral_interventions_in_reducing_classroom_aggressive_behavior

Fagan, A. A., & Catalano, R. F. (2013). What Works in Youth Violence Prevention: A Review of the Literature. *Research on Social Work Practice*, *23*(2), 141–156. https://doi.org/10.1177/1049731512465899

Division of Violence Prevention, National Center for Injury Control and Prevention, Centers for Disease Control and Prevention.

Fossum, S., Handegård, B. H., Martinussen, M., & Mørch, W. T. (2008). Psychosocial interventions for disruptive and aggressive behaviour in children and adolescents: A

meta-analysis. *European Child & Adolescent Psychiatry*, *17*(7), 438–451. https://doi.org/10.1007/s00787-008-0686-8

Gavine, A. J., Donnelly, P. D., & Williams, D. J. (2016). Effectiveness of universal school-based programs for prevention of violence in adolescents. *Psychology of Violence*, *6*(3), 390–399. https://doi.org/10.1037/vio0000052

Grove, A. B., Evans, S. W., Pastor, D. A., & Mack, S. D. (2008). A meta-analytic examination of follow-up studies of programs designed to prevent the primary symptoms of oppositional defiant and conduct disorders. *Aggression and Violent Behavior*, *13*(3), 169–184. https://doi.org/10.1016/j.avb.2008.03.001

Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Crosby, A., Fullilove, M., … Task Force on Community Preventive Services. (2007). Effectiveness of universal school-based programs to prevent violent and aggressive behavior: A systematic review. *American Journal of Preventive Medicine*, *33*(2 Suppl), S114-129. https://doi.org/10.1016/j.amepre.2007.04.012

Higgins, J. P. T., & Green, S. (Eds.). (2011). *Cochrane Handbook for Systematic Reviews of Interventions* (Version 5.1.0). Retrieved from http://handbook-5-1.cochrane.org/

Hyde, L. W., Burt, S. A., Shaw, D. S., Donnellan, M. B., & Forbes, E. E. (2015). Early starting, aggressive, and/or callous-unemotional? Examining the overlap and predictive utility of antisocial behavior subtypes. *Journal of Abnormal Psychology*, *124*(2), 329–342. https://doi.org/10.1037/abn0000029

Kelly, D. R. (2017). Methods for Reducing Violence in Schools: A Systematic Review. *Journal of Educational and Developmental Psychology*, *7*(1), p200. https://doi.org/10.5539/jedp.v7n1p200

Limbos, M. A., Chan, L. S., Warf, C., Schneir, A., Iverson, E., Shekelle, P., & Kipke, M. D. (2007). Effectiveness of interventions to prevent youth violence a systematic review. *American Journal of Preventive Medicine*, *33*(1), 65–74. https://doi.org/10.1016/j.amepre.2007.02.045

Lynne-Landsman, S. D., Graber, J. A., Nichols, T. R., & Botvin, G. J. (2011). Trajectories of aggression, delinquency, and substance use across middle school among urban, minority adolescents. *Aggressive Behavior*, *37*(2), 161–176. https://doi.org/10.1002/ab.20382

Melendez-Torres, G. J., Dickson, K., Fletcher, A., Thomas, J., Hinds, K., Campbell, R., … Bonell, C. (2016). Systematic review and meta-analysis of effects of community-delivered positive youth development interventions on violence outcomes. *Journal of Epidemiology and Community Health*, *70*(12), 1171–1177. https://doi.org/10.1136/jech-2015-206132

Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel: A Guide To Designing Interventions*. London: Silverback Publishing.

Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., … Wood, C. E. (2013). The Behavior Change Technique Taxonomy (v1) of 93 Hierarchically Clustered Techniques: Building an International Consensus for the Reporting of Behavior Change Interventions. *Annals of Behavioral Medicine*, *46*(1), 81–95. https://doi.org/10.1007/s12160-013-9486-6

Molina, I. A., Dulmus, C. N., & Sowers, K. M. (2005). Secondary Prevention for Youth Violence: A Review of Selected School-Based Programs. *Brief Treatment and Crisis Intervention*, *5*(1), 95–107. https://doi.org/10.1093/brief-treatment/mhi007

Montgomery, P., & Maunders, K. (2015). The effectiveness of creative bibliotherapy for internalizing, externalizing, and prosocial behaviors in children: A systematic review. *Children and Youth Services Review*, *55*, 37–47. https://doi.org/10.1016/j.childyouth.2015.05.010

Morris, S. B. (2008). Estimating Effect Sizes From Pretest-Posttest-Control Group Designs. *Organizational Research Methods*, *11*(2), 364–386. https://doi.org/10.1177/1094428106291059

Mytton, J., DiGuiseppi, C., Gough, D., Taylor, R., & Logan, S. (2006). School-based secondary prevention programmes for preventing violence. *The Cochrane Database of Systematic Reviews*, *19*(3), CD004606. https://doi.org/10.1002/14651858.CD004606.pub2

National Center for Injury Prevention and Control (U.S.). Division of Violence Prevention. (2019). *Preventing Youth Violence* (No. 1-800-CDC-INFO (232-4636)). Retrieved from Centers for Disease Control and Prevention website: https://www.cdc.gov/violenceprevention/pdf/yv-factsheet508.pdf

Özabacı, N. (2011). Cognitive behavioural therapy for violent behaviour in children and adolescents: A meta-analysis. *Children and Youth Services Review*, *33*(10), 1989–1993. https://doi.org/10.1016/j.childyouth.2011.05.027

Park-Higgerson, H.-K., Perumean-Chaney, S. E., Bartolucci, A. A., Grimley, D. M., & Singh, K. P. (2008). The evaluation of school-based violence prevention programs: A meta-analysis. *The Journal of School Health*, *78*(9), 465–479; quiz 518–520. https://doi.org/10.1111/j.1746-1561.2008.00332.x

Presseau, J., Ivers, N. M., Newham, J. J., Knittle, K., Danko, K. J., & Grimshaw, J. M. (2015). Using a behaviour change techniques taxonomy to identify active ingredients

within trials of implementation interventions for diabetes care. *Implementation Science*, *10*(1), 55. https://doi.org/10.1186/s13012-015-0248-7

R Core Team. (2019). R: A language and environment for statistical computing (Version 3.5.3). Retrieved from https://www.R-project.org/

Rhoades, K. A., Leve, L. D., Eddy, J. M., & Chamberlain, P. (2016). Predicting the transition from juvenile delinquency to adult criminality: Gender-specific influences in two high-risk samples. *Criminal Behaviour and Mental Health: CBMH*, *26*(5), 336–351. https://doi.org/10.1002/cbm.1957

Robinson, T. R., Smith, S. W., Miller, M. D., & Brownell, M. T. (1999). Cognitive behavior modification of hyperactivity–impulsivity and aggression: A meta-analysis of school-based studies. *Journal of Educational Psychology*, *91*(2), 195–203. https://doi.org/10.1037/0022-0663.91.2.195

Sawyer, A. M., Borduin, C. M., & Dopp, A. R. (2015). Long-term effects of prevention and treatment on youth antisocial behavior: A meta-analysis. *Clinical Psychology Review*, *42*, 130–144. https://doi.org/10.1016/j.cpr.2015.06.009

Scheckner, S., Rollin, S. A., Kaiser-Ulrey, C., & Wagner, R. (2002). School Violence in Children and Adolescents. *Journal of School Violence*, *1*(2), 5–32. https://doi.org/10.1300/J202v01n02_02

Smedler, A.-C., Hjern, A., Wiklund, S., Anttila, S., & Pettersson, A. (2015). Programs for Prevention of Externalizing Problems in Children: Limited Evidence for Effect Beyond 6 Months Post Intervention. *Child & Youth Care Forum*, *44*, 251–276. https://doi.org/10.1007/s10566-014-9281-y

Spruit, A., Assink, M., van Vugt, E., van der Put, C., & Stams, G. J. (2016). The effects of physical activity interventions on psychosocial outcomes in adolescents: A meta-

analytic review. *Clinical Psychology Review*, *45*, 56–71. https://doi.org/10.1016/j.cpr.2016.03.006

Suurmond, R., van Rhee, H., & Hak, T. (2017). Introduction, comparison, and validation of Meta-Essentials: A free and simple tool for meta-analysis. *Research Synthesis Methods*, *8*(4), 537–553. https://doi.org/10.1002/jrsm.1260

Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology*, *7*(1), 27–56. https://doi.org/10.1007/s11292-010-9109-1

Viechtbauer, W. (2010). Conducting Meta-Analyses in R with the metafor Package. *Journal of Statistical Software*, *36*(1), 1–48. https://doi.org/10.18637/jss.v036.i03

Viechtbauer, W., & Cheung, M. W.-L. (2010). Outlier and influence diagnostics for meta-analysis. *Research Synthesis Methods*, *1*(2), 112–125. https://doi.org/10.1002/jrsm.11

Weisz, J. R., Kuppens, S., Ng, M. Y., Eckshtain, D., Ugueto, A. M., Vaughn-Coaxum, R., … Fordwood, S. R. (2017). What five decades of research tells us about the effects of youth psychological therapy: A multilevel meta-analysis and implications for science and practice. *American Psychologist*, *72*(2), 79–117. https://doi.org/10.1037/a0040360

Wilson, D. B. (2001). Practical Meta-analysis Effect Size Calculator. Retrieved 4 July 2019, from http://www.campbellcollaboration.org/escalc/html/EffectSizeCalculator-SMD-main.php

Wilson, S. J., & Lipsey, M. W. (2007). School-Based Interventions for Aggressive and Disruptive Behavior: Update of a Meta-Analysis. *American Journal of Preventive Medicine*, *33*(2 Suppl), S130–S143. https://doi.org/10.1016/j.amepre.2007.04.011

Wolfe, D. A., Crooks, C., Jaffe, P., Chiodo, D., Hughes, R., Ellis, W., … Donner, A. (2009). A School-Based Program to Prevent Adolescent Dating Violence: A Cluster Randomized Trial. *Archives of Pediatrics & Adolescent Medicine*, *163*(692–699). https://doi.org/10.1001/archpediatrics.2009.69

Yeager, D. S., Dahl, R. E., & Dweck, C. S. (2018). Why Interventions to Influence Adolescent Behavior Often Fail but Could Succeed. *Perspectives on Psychological Science*, *13*(1), 101–122. https://doi.org/10.1177/1745691617722620

Appendix A

Overview of previous systematic reviews and meta-analysis

Table A1

Overview of previous systematic reviews and meta-analysis

Reference	Main focus	Type	Years	Age	Moderators found	Effective components
Atienzo, Baxter, and Kaltenthaler (2017)	Interventions in Latin America	SR	Up to 2015	10-24		
Beelmann and Lösel (2006)	Social Skills Training	MA	1971-2000	4-18	Level of risk^{+}, age^{+}, intensity of intervention^{+}	Cognitive Behavioural Training
Brännström, Kaunitz, Andershed, South, and Smedslund (2016)	Aggression Replacement Training	SR	1987-2004	Above 12		
Cassidy, Bowman, McGarth, and Matzopoulus (2016)	Media campaigns	SR	1995-2008	10-29		
Cid (2017)	Targeted after-school programs in Latin America	SR	2012-2016	6-20	Level of risk^{+}, parent commitment^{+}, gender (m)	
Cooper, Lutenbacher, & Faccia (2000)	Violence prevention programs	SR	1980-1999	7-14		Classroom teaching, peer mediation
Cox et al. (2016)	Interventions in Australia	SR	Up to 2013	12-18		Interactive

Fagan and Catalano (2013)	Intervention programs	SR	1992-2012	0-18	Duration of intervention^{-}, intensity of intervention^{+}	
Fossum, Handegård, Adolfsen, Vis, and Wynn (2016)	Targeted psychosocial and psychopharmacological interventions	MA	1980-2010	2-17	Individual interventions^{+}	Cognitive Behavioural Training
Fossum et al. (2008)	Indicated interventions	MA	1987-2008	Under 18	Age^{-}	Behavioural training
Gaffney, Ttofi and Farrington (2019)	Universal school-based interventions	MA	2009-2016	4-18		
Gavine et al. (2016)	Universal school-based interventions	SR	2002-2014	11-18	Level of risk^{+}	
Grove et al. (2008)	Studies with at least 6 months follow up	MA	1980-2007	Under 19		
Hahn et al. (2007)	Universal school-based interventions	SR	Up to 2004	2-19	Age (more effective in kindergarten and high school)	
Harwood, Lavidor and Rassovsky (2017)	Martial arts	MA	1980-2015	Up to 18		
Howard, Flora and Griffin (1999)	School-based interventions	SR	1993-1997	2-19		
Kelly (2017)	School-based interventions that include	SR	1999-2015	12-17		

	mentoring in the United States					
Limbos et al. (2007)	Interventions in the United States	SR	1990-2006	12-17	Level of risk[+], duration of intervention[+]	
McCart, Priester, Davies and Azen (2006)	Parent Training and Cognitive Behavioural Training	MA	Up to 2005	Under 18	Age (CBT is more effective in older children)	Behavioural parent training
Melendez-Torres et al. (2016)	Positive youth development interventions	MA	1985-2014	11-18		
Merrel, Gueldner, Ross and Isava (2008)	School-based interventions	MA	1980-2004	4-19		
Molina et al. (2005)	Targeted school-based interventions in the United States	SR	1990-2004	6-12		Cognitive Behavioural Training and Social Skills Training
Montgomery and Maunders (2015)	Creative bibliotherapy	MA	1983-2014	5-15		
Mytton et al. (2006)	Targeted school-based interventions	MA	Up to 2003	2-19	Age[+]	Social Skills Training
Neville, Goodall, Williams, and Donnelly (2014)	Individual brief interventions targeted to male	SR	Up to 2013	Above 10		Motivational interviewing, social norms

Özabacı (2011)	Targeted Cognitive Behavioural Therapy	MA	1997-2009	6-18	
Park-Higgerson et al. (2008)	School-based interventions	MA	1970-2004	5-17	Level of risk^{+}, age^{+}, facilitator (delivered by specialist were more effective than delivered by a teacher)
Robinson, Smith, Miller, and Brownell (1999)	Targeted school-based cognitive behaviour modification	MA	1971-1993	2-19	
Sawyer et al. (2015)	Targeted interventions with at least one-year follow-up	MA	Up to 2010	Under 18	Level of risk^{+}, gender (f), informant (observation showed the largest effect and parent report the smallest), facilitator (delivered by the researcher were more effective than delivered by professionals)

Scheckner, Rollin, Kaiser-Ulrey, and Wagner (2002)	Universal school-based interventions	SR	1990-1999	2-19	Age (most effective in elementary school), more than one setting, training^{+}	
Smedler et al. (2015)	Intervention programs with at least 6 months follow up	SR	1990-2013	2-19	Level of risk^{-}, family internal stress^{+}	Good Behaviour Game, Parental Management Training
Silva et al. (2018)	School-based social skills training	MA	2003-2014	8-16		
Smeets et al. (2015)	Targeted Cognitive Behaviour Therapy	MA	2000-2013	Up to 23		
Spruit et al. (2016)	Sports participation	MA	Up to 2015	10-21		
Stoltz, Londen, Deković, Castro, and Prinzie (2012)	Individual targeted school-based interventions	MA	1975-2011	2-12	Age^{-}	
Ttofi, and Farrington (2011)	Universal school-based interventions	MA	1983-2009	3-16	Age^{+}, duration of intervention^{+}, intensity of intervention^{+}, teacher's training^{+}	Parent training, disciplinary methods, playground supervision, classroom management, classroom rules, whole-school policy, school conferences,

						information for parents, cooperative group work.
Wilson and Lipsey (2007)	School-based interventions	MA	1950-2007	2-19	Level of risk^{+}, socioeconomic status^{-}, age^{-}, duration of intervention^{+}, intensity of intervention^{+}, individual interventions	Behavioural strategies
Wilson, Gottfredson, and Najaka (2001)	School-based interventions	MA	Up to 2000	2-19	Level of risk^{+}	Interventions focused on the environment, Cognitive Behavioural Training and Behavioural Training

Note. SR = Systematic review; MA = Meta-analysis; gender (m) = interventions were more effective for males; gender (f) = interventions were more effective for females.

$^{+}$ Interventions were more effective with a higher level of these moderators. $^{-}$ Interventions were more effective with lower levels of these moderators

References

Atienzo, E. E., Baxter, S. K., & Kaltenthaler, E. (2017). Interventions to prevent youth violence in Latin America: A systematic review. *International Journal of Public Health*, *62*(1), 15–29. https://doi.org/10.1007/s00038-016-0909-6

Beelmann, A., & Lösel, F. (2006). Child social skills training in developmental crime prevention: Effects on antisocial behavior and social competence. *Psicothema*, *18*(3), 603–610.

Brännström, L., Kaunitz, C., Andershed, A.-K., South, S., & Smedslund, G. (2016). Aggression replacement training (ART) for reducing antisocial behavior in adolescents and adults: A systematic review. *Aggression and Violent Behavior*, *27*, 30–41. https://doi.org/10.1016/j.avb.2016.02.006

Cassidy, T., Bowman, B., McGrath, C., & Matzopoulos, R. (2016). Brief report on a systematic review of youth violence prevention through media campaigns: Does the limited yield of strong evidence imply methodological challenges or absence of effect? *Journal of Adolescence*, *52*, 22–26. https://doi.org/10.1016/j.adolescence.2016.07.002

Cid, A. (2017). Interventions Using Regular Activities to Engage High-Risk School-Age Youth: A Review of After-School Programs in Latin America and the Caribbean. *Prevention Science: The Official Journal of the Society for Prevention Research*, *18*(7), 879–886. https://doi.org/10.1007/s11121-016-0708-6

Cooper, W. O., Lutenbacher, M., & Faccia, K. (2000). Components of effective youth violence prevention programs for 7- to 14-year-olds. *Archives of Pediatrics & Adolescent Medicine*, *154*(11), 1134–1139.

Cox, E., Leung, R., Baksheev, G., Day, A., Toumbourou, J. W., Miller, P., … Walker, A. (2016). Violence Prevention and Intervention Programmes for Adolescents in Australia: A Systematic Review. *Australian Psychologist*, *51*(3), 206–222. https://doi.org/10.1111/ap.12168

Silva, J. L. da, Oliveira, W. A. de, Zequinão, M. A., Lizzi, E. A. da S., Pereira, B. O., Silva, M. A. I., … Silva, M. A. I. (2018). Results from Interventions Addressing Social Skills to Reduce School Bullying: A Systematic Review with Meta-Analysis. *Trends in Psychology*, *26*(1), 509–522. https://doi.org/10.9788/tp2018.1-20pt

Fagan, A. A., & Catalano, R. F. (2013). What Works in Youth Violence Prevention: A Review of the Literature. *Research on Social Work Practice*, *23*(2), 141–156. https://doi.org/10.1177/1049731512465899

Fossum, S., Handegård, B. H., Adolfsen, F., Vis, S. A., & Wynn, R. (2016). A Meta-Analysis of Long-Term Outpatient Treatment Effects for Children and Adolescents with Conduct Problems. *Journal of Child and Family Studies*, *25*(1), 15–29. https://doi.org/10.1007/s10826-015-0221-8

Fossum, S., Handegård, B. H., Martinussen, M., & Mørch, W. T. (2008). Psychosocial interventions for disruptive and aggressive behaviour in children and adolescents: A meta-analysis. *European Child & Adolescent Psychiatry*, *17*(7), 438–451. https://doi.org/10.1007/s00787-008-0686-8

Gaffney, H., Ttofi, M. M., & Farrington, D. P. (2019). Evaluating the effectiveness of school-bullying prevention programs: An updated meta-analytical review. *Aggression and Violent Behavior*, *45*, 111–133. https://doi.org/10.1016/j.avb.2018.07.001

Gavine, A. J., Donnelly, P. D., & Williams, D. J. (2016). Effectiveness of universal school-based programs for prevention of violence in adolescents. *Psychology of Violence*, *6*(3), 390–399. https://doi.org/10.1037/vio0000052

Grove, A. B., Evans, S. W., Pastor, D. A., & Mack, S. D. (2008). A meta-analytic examination of follow-up studies of programs designed to prevent the primary symptoms of oppositional defiant and conduct disorders. *Aggression and Violent Behavior*, *13*(3), 169–184. https://doi.org/10.1016/j.avb.2008.03.001

Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Crosby, A., Fullilove, M., … Task Force on Community Preventive Services. (2007). Effectiveness of universal school-based programs to prevent violent and aggressive behavior: A systematic review. *American Journal of Preventive Medicine*, *33*(2 Suppl), S114-129. https://doi.org/10.1016/j.amepre.2007.04.012

Harwood, A., Lavidor, M., & Rassovsky, Y. (2017). Reducing aggression with martial arts: A meta-analysis of child and youth studies. *Aggression and Violent Behavior*, *34*, 96–101. https://doi.org/10.1016/j.avb.2017.03.001

Howard, K. A., Flora, J., & Griffin, M. (1999). Violence-prevention programs in schools: State of the science and implications for future research. *Applied & Preventive Psychology*, *8*(3), 197–215. https://doi.org/10.1016/S0962-1849(05)80077-0

Kelly, D. R. (2017). Methods for Reducing Violence in Schools: A Systematic Review. *Journal of Educational and Developmental Psychology*, *7*(1), p200. https://doi.org/10.5539/jedp.v7n1p200

Limbos, M. A., Chan, L. S., Warf, C., Schneir, A., Iverson, E., Shekelle, P., & Kipke, M. D. (2007). Effectiveness of interventions to prevent youth violence a systematic review. *American Journal of Preventive Medicine*, *33*(1), 65–74. https://doi.org/10.1016/j.amepre.2007.02.045

McCart, M. R., Priester, P. E., Davies, W. H., & Azen, R. (2006). Differential effectiveness of behavioral parent-training and cognitive-behavioral therapy for antisocial youth: A meta-analysis. *Journal of Abnormal Child Psychology*, *34*(4), 527–543. https://doi.org/10.1007/s10802-006-9031-1

Melendez-Torres, G. J., Dickson, K., Fletcher, A., Thomas, J., Hinds, K., Campbell, R., … Bonell, C. (2016). Systematic review and meta-analysis of effects of community-delivered positive youth development interventions on violence outcomes. *Journal of Epidemiology and Community Health*, *70*(12), 1171–1177. https://doi.org/10.1136/jech-2015-206132

Merrell, K. W., Gueldner, B. A., Ross, S. W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, *23*(1), 26–42. https://doi.org/10.1037/1045-3830.23.1.26

Molina, I. A., Dulmus, C. N., & Sowers, K. M. (2005). Secondary Prevention for Youth Violence: A Review of Selected School-Based Programs. *Brief Treatment and Crisis Intervention*, *5*(1), 95–107. https://doi.org/10.1093/brief-treatment/mhi007

Montgomery, P., & Maunders, K. (2015). The effectiveness of creative bibliotherapy for internalizing, externalizing, and prosocial behaviors in children: A systematic review. *Children and Youth Services Review*, *55*, 37–47. https://doi.org/10.1016/j.childyouth.2015.05.010

Mytton, J., DiGuiseppi, C., Gough, D., Taylor, R., & Logan, S. (2006). School-based secondary prevention programmes for preventing violence. *The Cochrane Database of Systematic Reviews*, *19*(3), CD004606. https://doi.org/10.1002/14651858.CD004606.pub2

Neville, F. G., Goodall, C. A., Williams, D. J., & Donnelly, P. D. (2014). Violence brief interventions: A rapid review. *Aggression and Violent Behavior*, *19*(6), 692–698. https://doi.org/10.1016/j.avb.2014.09.015

Özabacı, N. (2011). Cognitive behavioural therapy for violent behaviour in children and adolescents: A meta-analysis. *Children and Youth Services Review*, *33*(10), 1989–1993. https://doi.org/10.1016/j.childyouth.2011.05.027

Park-Higgerson, H.-K., Perumean-Chaney, S. E., Bartolucci, A. A., Grimley, D. M., & Singh, K. P. (2008). The evaluation of school-based violence prevention programs: A meta-analysis. *The Journal of School Health*, *78*(9), 465–479; quiz 518–520. https://doi.org/10.1111/j.1746-1561.2008.00332.x

Robinson, T. R., Smith, S. W., Miller, M. D., & Brownell, M. T. (1999). Cognitive behavior modification of hyperactivity–impulsivity and aggression: A meta-analysis of school-based studies. *Journal of Educational Psychology*, *91*(2), 195–203. https://doi.org/10.1037/0022-0663.91.2.195

Sawyer, A. M., Borduin, C. M., & Dopp, A. R. (2015). Long-term effects of prevention and treatment on youth antisocial behavior: A meta-analysis. *Clinical Psychology Review*, *42*, 130–144. https://doi.org/10.1016/j.cpr.2015.06.009

Scheckner, S., Rollin, S. A., Kaiser-Ulrey, C., & Wagner, R. (2002). School Violence in Children and Adolescents. *Journal of School Violence*, *1*(2), 5–32. https://doi.org/10.1300/J202v01n02_02

Smedler, A.-C., Hjern, A., Wiklund, S., Anttila, S., & Pettersson, A. (2015). Programs for Prevention of Externalizing Problems in Children: Limited Evidence for Effect Beyond 6 Months Post Intervention. *Child & Youth Care Forum*, *44*, 251–276. https://doi.org/10.1007/s10566-014-9281-y

Smeets, K. C., Leeijen, A. A. M., van der Molen, M. J., Scheepers, F. E., Buitelaar, J. K., & Rommelse, N. N. J. (2015). Treatment moderators of cognitive behavior therapy to reduce aggressive behavior: A meta-analysis. *European Child & Adolescent Psychiatry*, *24*(3), 255–264. https://doi.org/10.1007/s00787-014-0592-1

Spruit, A., Assink, M., van Vugt, E., van der Put, C., & Stams, G. J. (2016). The effects of physical activity interventions on psychosocial outcomes in adolescents: A meta-analytic review. *Clinical Psychology Review*, *45*, 56–71. https://doi.org/10.1016/j.cpr.2016.03.006

Stoltz, S., Londen, M. van, Deković, M., Castro, B. O. de, & Prinzie, P. (2012). Effectiveness of individually delivered indicated school-based interventions on externalizing behavior. *International Journal of Behavioral Development*, *36*(5), 381–388. https://doi.org/10.1177/0165025412450525

Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology*, *7*(1), 27–56. https://doi.org/10.1007/s11292-010-9109-1

Wilson, S. J., & Lipsey, M. W. (2007). School-Based Interventions for Aggressive and Disruptive Behavior: Update of a Meta-Analysis. *American Journal of Preventive Medicine*, *33*(2 Suppl), S130–S143. https://doi.org/10.1016/j.amepre.2007.04.011

Wilson, D. B., Gottfredson, D. C., & Najaka, S. S. (2001). School-Based Prevention of Problem Behaviors: A Meta-Analysis. *Journal of Quantitative Criminology*, *17*(3), 247–272. https://doi.org/10.1023/A:1011050217296

Wilson, S. J., & Lipsey, M. W. (2007). School-Based Interventions for Aggressive and Disruptive Behavior: Update of a Meta-Analysis. *American Journal of Preventive Medicine*, *33*(2 Suppl), S130–S143. https://doi.org/10.1016/j.amepre.2007.04.011

Appendix B

List of excluded studies after full text screening with reasons for exclusion

Reason of exclusion: assignment to groups it is not randomised or the comparison group receives a competing intervention

Aber, J. L., Jones, S. M., Brown, J. L., Chaudry, N., & Samples, F. (1998). Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context. *Development and Psychopathology, 10*(2), 187-213.

Aboutanos, M. B., Jordan, A., Cohen, R., Foster, R. L., Goodman, K., Halfond, R. W., . . . Ivatury, R. R. (2011). Brief violence interventions with community case management services are effective for high-risk trauma patients. *Journal of Trauma - Injury, Infection and Critical Care, 71*(1), 228-237. doi:10.1097/TA.0b013e31821e0c86

Adalbjarnardóttir, S. (1999). Tracing the developmental processes of teachers and students: A sociomoral approach in school. *Scandinavian Journal of Educational Research, 43*(1), 57-79.

Ager, A., Akesson, B., Stark, L., Flouri, E., Okot, B., McCollister, F., & Boothby, N. (2011). The impact of the school-based Psychosocial Structured Activities (PSSA) program on conflict-affected children in northern Uganda. *Journal of Child Psychology and Psychiatry, 52*(11), 1124-1133. doi:10.1111/j.1469-7610.2011.02407.x

Alexander, C. M., Hutchison, A. N., Clougher, K. M., Davis, H. A., Shepler, D. K., & Ambroise, Y. (2014). Adolescent dating violence: Application of a us primary prevention program in St. Lucia. *Journal of Counseling & Development, 92*(4), 489-498.

Allen, O. R. (2016). *Teens in Transition: Evaluating a Youth Violence Intervention Program* (Doctoral dissertation, University of Missouri--Kansas City).

Ando, M., Asakura, T., Ando, S., & Simons-Morton, B. (2007). A psychoeducational program to prevent aggressive behavior among Japanese early adolescents. *Health Education & Behavior, 34*(5), 765-776.

Ando, M., Asakura, T., Ando, S., & Simons-Morton, B. (2007). A psychoeducational program to prevent aggressive bjehavior among Japanese early adolescents. *Health Education & Behavior, 34*(5), 765-776. doi:10.1177/1090198106291965

Andreou, E., Didaskalou, E., & Vlachou, A. (2007). Evaluating the effectiveness of a curriculum-based anti-bullying intervention program in Greek primary schools. *Educational Psychology, 27*(5), 693-711.

Andreou, E., Paparoussi, M., & Gkouni, V. (2013). The effects of an anti-bullying bibliotherapy intervention on children's attitudes and behavior. *Global Journal of Arts Humanities and Social Sciences, 1*(4), 102-113.

Ang, R. P. (2003). Social Problem-Solving Skills Training: Does it Really Work? *Child Care in Practice, 9*(1), 5-13. doi:10.1080/13575270302169

Bacon, T. P. (2004). *Technical report: pilot study of the Too Good for Drugs and Violence after-school activities program*. A project funded by the CE Mendez Foundation. Inc., Tampa FL.

Baez, A. (2003). A group approach to fostering self-cohesion and developmental progression in female adolescent group home residents. *Child and Adolescent Social Work Journal, 20*(5), 351-373.

Bailey, K. (1998). *The Effects of Social Skills Training and Reciprocal Social Skills Training with Parent/Guardian (s) on Behavior and Recidivism of First Time Adjuncted Youth*: scholarworks.wmich.edu.

Ballard, J. D. (2006). Social skills training: Effects on behavior and recidivism with first-time adjudicated youth. *Applied Psychology in Criminal Justice, 2*(1).

Barnes, V. A., Bauza, L. B., & Treiber, F. A. (2003). Impact of stress reduction on negative school behavior in adolescents. *Health and Quality of Life Outcomes, 1*. doi:10.1186/1477-7525-1-10

Barnoski, R., & Aos, S. (2004). *Outcome evaluation of Washington State's research-based programs for juvenile offenders*. Olympia, WA: Washington State Institute for Public Policy, 460.

Barron-McKeagney, T., Woody, J. D., & D'Souza, H. J. (2001). Mentoring at-risk Latino children and their parents: Impact on social skills and problem behaviors. *Child and Adolescent Social Work Journal, 18*(2), 119-136.

Barthelus, B. (2015). *The relationship between student infractions and social emotional competence: A program evaluation of Responsive Classroom (RTM).*

Battistich, V., Schaps, E., Watson, M., Solomon, D., & Lewis, C. (2000). Effects of the Child Development Project on students' drug use and other problem behaviors. *Journal of Primary Prevention, 21*(1), 75-99.

Battistich, V., Schaps, E., & Wilson, N. (2004). Effects of an elementary school intervention on students'"connectedness" to school and social adjustment during middle school. *Journal of Primary Prevention, 24*(3), 243-262.

Baxter, A. (2009). *The Effects of a Mentoring Program on the Behavior Rating of Children*: thescholarship.ecu.edu.

Becker, W. C., Madsen, C. H., & Arnold, C. R. (1967). The contingent use of teacher attention and praise in reducing classroom behavior problems. *The Journal of Special Education, 1*(3), 287-307. doi:10.1177/002246696700100307

Beldean-galea, I. E., Ţigan, Ş. I., Cristian, S. & Dobrean, A. (2012). Efficacy Study of a Primary Intervention School Violence Program. *Applied Medical Informatics, 31*(3), 47-54.

Bencuya, N. L. (2013). *Acceptance and Mindfulness Treatment for Children Adopted From Foster Care.* (3594553 Ph.D.), University of California, Los Angeles, Ann Arbor. Retrieved from https://search.proquest.com/docview/1442832555?accountid=13828

Beran, T. N., Tutty, L., & Steinrath, G. (2004). An evaluation of a bullying prevention program for elementary schools. *Canadian Journal of School Psychology, 19*(1-2), 99-116.

Berry, B. (2015). *A Single-Subject Evaluation of the Target Bullying Intervention Program*: digitalcommons.unl.edu.

Bhatt, R., & Davis, T. (2018). The Impact of Random Metal Detector Searches on Contraband Possession and Feelings of Safety at School. *Educational Policy, 32*(4), 569-597.

Board, Y. J. (2004). *National evaluation of the restorative justice in schools programme*. London: Youth Justice Board. Whose Justice.

Bodtker, A. (2001). Conflict education and special-needs students, part two: Improving conflict competence and emotional competence. *Mediation Quarterly, 18*(4), 377-395.

Bögels, S., Hoogstad, B., van Dun, L., de Schutter, S., & Restifo, K. (2008). Mindfulness training for adolescents with externalizing disorders and their parents. *Behavioural and Cognitive Psychotherapy, 36*(2), 193-209.

Bonell, C., Sorhaindo, A., Strange, V., Wiggins, M., Allen, E., Fletcher, A., . . . Patton, G. (2010). A pilot whole-school intervention to improve school ethos and reduce substance use. *Health Education, 110*(4), 252-272.

Bonell, C. P., Sorhaindo, A. M., Allen, E. E., Strange, V. J., Wiggins, M., Fletcher, A., . . . Rhodes, T. (2010). Pilot Multimethod Trial of a School-Ethos Intervention to Reduce Substance Use: Building Hypotheses About Upstream Pathways to Prevention. *Journal of Adolescent Health, 47*(6), 555-563. doi:10.1016/j.jadohealth.2010.04.011

Bortes, C., Geidne, S., & Eriksson, C. (2016). Evaluating the effectiveness of the SMART contract-signing strategy in reducing the growth of Swedish Adolescents' substance use and problem behaviors. *BMC Public Health, 16*. doi:10.1186/s12889-016-3131-9

Bosworth, K. (2002). “Talking It Out”: A Computer-Based Mediation Process for Adolescents. *Journal of Technology in Human Services, 20*(1-2), 67-81.

Bosworth, K., Espelage, D., & DuBay, T. (1998). A computer-based violence prevention intervention for young adolescents: Pilot study. *Adolescence, 33*(132), 785.

Botvin, G. J., Schinke, S. P., Epstein, J. A., Diaz, T., & Botvin, E. M. (1995). Effectiveness of culturally focused and generic skills training approaches to alcohol and drug abuse prevention among minority adolescents: Two-year follow-up results. *Psychology of Addictive Behaviors, 9*(3), 183.

Bowllan, N. M. (2011). Implementation and evaluation of a comprehensive, school-wide bullying prevention program in an urban/suburban middle school. *Journal of School Health, 81*(4), 167-173.

Bretherton, D. (1996). Nonviolent conflict resolution in children. *Peabody Journal of Education, 71*(3), 111-127.

Bretherton, D., Collins, L., & Ferretti, C. (1993). Dealing with conflict: Assessment of a course for secondary school students. *Australian Psychologist, 28*(2), 105-111.

Buckley, L., Sheehan, M., & Shochet, I. (2010). Short-term evaluation of a school-based adolescent injury prevention program: Determining positive effects or iatrogenic outcomes. *The Journal of Early Adolescence, 30*(6), 834-853.

Burke, C., Mulmat, D., Rohanna, K., Liwanag, G., Doroski, L., & Murphy, A. (2008). *Probation evaluation, assessment, and cost-effectiveness (PEACE) study final report.*

Bushman, B. B., & Peacock, G. G. (2010). Does teaching problem-solving skills matter? An evaluation of problem-solving skills training for the treatment of social and behavioral problems in children. *Child & Family Behavior Therapy, 32*(2), 103-124.

Buys, C. J. (1972). Effects of teacher reinforcement on elementary pupils' behavior and attitudes. *Psychology in the Schools, 9*(3), 278-288. doi:doi:10.1002/1520-6807(197207)9:3<278::AID-PITS2310090304>3.0.CO;2-T

Carter, P. M., Walton, M. A., Zimmerman, M. A., Chermack, S. T., Roche, J. S., & Cunningham, R. M. (2016). Efficacy of a Universal Brief Intervention for Violence Among Urban Emergency Department Youth. *Academic Emergency Medicine, 23*(9), 1061-1070. doi:10.1111/acem.13021

Choi, A.-N., Lee, M. S., & Lee, J.-S. (2010). Group Music Intervention Reduces Aggression and Improves Self-esteem in Children with Highly Aggressive Behavior: A Pilot Controlled Trial. *Evidence-Based Complementary and Alternative Medicine, 7*(2), 213-217. doi:10.1093/ecam/nem182

Corrigan, M., Gove, D., & Douglass, J. (2014). *A Quasi-Experimental Study on the Efficacy of School-Connect®: Optimizing the High School Experience*. Multi-Dimensional Education Inc.

Cox, H. (2016). *Designing, implementing and evaluating a resilience-based life skills intervention for adolescents within West Wales via the 'vehicle' of golf* (Doctoral dissertation, Cardiff Metropolitan University).

Crooks, C. V., Exner-Cortens, D., Burm, S., Lapointe, A., & Chiodo, D. (2017). Two years of relationship-focused mentoring for First Nations, Métis, and Inuit adolescents: Promoting positive mental health. *The journal of primary prevention, 38*(1-2), 87-104.

D'Oosterlinck, F., Goethals, I., Boekaert, E., Schuyten, G., & De Maeyer, J. (2008). Implementation and Effect of Life Space Crisis Intervention in Special Schools with Residential Treatment for Students with Emotional and Behavioral Disorders (EBD). *Psychiatric Quarterly, 79*(1), 65-79. doi:10.1007/s11126-007-9057-8

Das, R. (2017). Impact of School-wide Positive Behaviour Supports on Student Behaviour. *International Journal of Education and Psychological Research (IJEPR), 6*(2), 61-63.

DeJong, W. (1987). A short-term evaluation of Project DARE (Drug Abuse Resistance Education): Preliminary indications of effectiveness. *Journal of Drug Education, 17*(4), 279-294.

DeWit, D. J., Steep, B., Silverman, G., Stevens-Lavigne, A., Ellis, K., Smythe, C., . . . Wood, E. (2000). Evaluating an In-School Drug Prevention Program for At-Risk Youth. *Alberta Journal of Educational Research; Vol 46, No 2 (2000): Summer 2000*.

D'Oosterlinck, F., Goethals, I., Boekaert, E., Schuyten, G., & De Maeyer, J. (2008). Implementation and effect of life space crisis intervention in special schools with residential treatment for students with emotional and behavioral disorders (EBD). *Psychiatric Quarterly, 79*(1), 65-79.

Dorsey, R. J., & Howard, A. M. (2011, June). Measuring the Effectiveness of Robotics Activities in Underserved K-12 Communities outside the Classroom. In *2011 ASEE Annual Conference & Exposition* (pp. 22-1050).

Eggert, L. L., Seyi, C. D., & Nicholas, L. J. (1990). Effects of a school-based prevention program for potential high school dropouts and drug abusers. *International Journal of the Addictions, 25*(7), 773-801.

Eiling, E., Van Diggele-Holtland, M., Van Yperen, T., & Boer, F. (2014). Psychosocial support for children in the Republic of South Sudan: an evaluation outcome. *Interv: J Mental Health Psychosocial Support Conflict Affected Area, 12*(1), 61-75.

Eren, O., Depew, B., & Barnes, S. (2017). Test-based promotion policies, dropping out, and juvenile crime. *Journal of Public Economics, 153*, 9-31.

Esbensen, F. A., Osgood, D. W., Taylor, T. J., Peterson, D., & Freng, A. (2001). How great is GREAT? Results from a longitudinal quasi-experimental design. *Criminology & Public Policy, 1*(1), 87-118.

Espelage, D. L., Low, S., Polanin, J. R., & Brown, E. C. (2015). Clinical trial of Second Step© middle-school program: Impact on aggression & victimization. *Journal of Applied Developmental Psychology, 37*, 52-63.

Espelage, D. L., Low, S., Van Ryzin, M. J., & Polanin, J. R. (2015). Clinical trial of second step middle school program: Impact on bullying, cyberbullying, homophobic teasing, and sexual harassment perpetration. *School Psychology Review, 44*(4), 464-479.

Farkas, M. S., Simonsen, B., Migdole, S., Donovan, M. E., Clemens, K., & Cicchese, V. (2012). Schoolwide positive behavior support in an alternative school setting: An evaluation of fidelity, outcomes, and social validity of tier 1 implementation. *Journal of Emotional and Behavioral Disorders, 20*(4), 275-288.

Farrell, A. D., Meyer, A. L., & Dahlberg, L. L. (1996). Richmond youth against violence: A school-based program for urban adolescents. *American Journal of Preventive Medicine, 12*(5), 13-21.

Farrell, A. D., Valois, R. F., Meyer, A. L., & Tidwell, R. P. (2003). Impact of the RIPP Violence Prevention Program on Rural Middle School Students. *Journal of Primary Prevention, 24*(2), 143-167. doi:10.1023/A:1025992328395

Feindler, E. (2016). Program Evaluation Challenges: Is Aggression Replacement Training (ART) Effective? *Journal of Psychology, 4*(2), 21-36.

Fekkes, M., van de Sande, M. C. E., Gravesteijn, J. C., Pannebakker, F. D., Buijs, G. J., Diekstra, R. F. W., & Kocken, P. L. (2016). Effects of the Dutch Skills for Life program on the health behavior, bullying, and suicidal ideation of secondary school students. *Health Education, 116*(1), 2-15. doi:10.1108/he-05-2014-0068

Fishbein, D., Hyde, C., Coe, B., & Paschall, M. J. (2004). Neurocognitive and physiological prerequisites for prevention of adolescent drug abuse. *Journal of Primary Prevention, 24*(4), 471-495.

Fitzpatrick, C., Conlon, A., Cleary, D., Power, M., King, F., & Guerin, S. (2013). Enhancing the mental health promotion component of a health and personal development programme in Irish schools. *Adv Sch Ment Health Promot, 6*(2), 122-138. doi:10.1080/1754730x.2013.784617

Flay, B. R., Allred, C. G., & Ordway, N. (2001). Effects of the Positive Action Program on Achievement and Discipline: Two Matched-Control Comparisons. *Prevention Science, 2*(2), 71-89. doi:10.1023/a:1011591613728

Flay, B. R., Graumlich, S., Segawa, E., Burns, J. L., & Holliday, M. Y. (2004). Effects of 2 Prevention Programs on High-Risk Behaviors among African American Youth: A Randomized Trial. *Archives of Pediatrics and Adolescent Medicine, 158*(4), 377-384. doi:10.1001/archpedi.158.4.377

Flood, M., & Kendrick, V. (2012). *LOVEBiTES: An evaluation of the LOVEBiTES and respectful relationships programs in a Sydney school*: ro.uow.edu.au.

Folino, A. (2011). *The Effects of Antecendent Exercise on Students' Disruptive Behaviours: An Exploratory Analysis of Temporal Effects and Mechanism of Action* (Doctoral dissertation).

Franklin, C. (1988, November). *A University Based Alternative School for High School Dropouts* [Paper presentation]. Annual Meeting of the National Association of Social Workers, Philadelphia, PA.

Furgurson, L. K. (1978). *A cognitive behavioral treatment for impulsive aggressive behavior in emotionally disturbed children* (Master's Theses).

Gabriel, R. M., Hopson, T., Haskins, M., & Powell, K. E. (1996). Building relationships and resilience in the prevention of youth violence. *American Journal of Preventive Medicine, 12*(5), 48-55.

Gainer, P. S., Webster, D. W., & Champion, H. R. (1993). A youth violence prevention program: Description and preliminary evaluation. *Archives of Surgery, 128*(3), 303-308. doi:10.1001/archsurg.1993.01420150059011

Gibson, M., Burke, S., & Downie, V. (2012). *Lynwood Charlton Centre: The Hamilton Residential Phases Program*: excellenceforchildandyouth.ca.

Giles, S. M., Harrington, N. G., & Fearnow-Kenney, M. (2001). Evaluation of the All Stars Program: Student and teacher factors that influence mediators of substance use. *Journal of drug education, 31*(4), 385-397.

Giles, S. M., Pankratz, M. M., Ringwalt, C., Hansen, W. B., Dusenbury, L., & Jackson-Newsom, J. (2010). Teachers' delivery skills and substance use prevention program outcomes: The moderating role of students' need for cognition and impulse decision making. *Journal of Drug Education, 40*(4), 395-410.

Gökkaya, F., & Sütcü, S. T. (2018). Developing A Cognitive Behavioral Intervention Program to Reduce Bully Tendencies in Primary School Children and The Program Effectiveness. *Education & Science/Egitim ve Bilim, 42*(193).

Gollwitzer, M., Eisenbach, K., Atria, M., Strohmeier, D., & Banse, R. (2006). Evaluation of aggression-reducing effects of the" Viennese Social Competence Training.". *Swiss*

Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie, 65(2), 125.

Goring, J. C. (2003). *Differential Responses of Children with Varying Degrees of Reactive and Proactive Aggression to Two Forms of Psychosocial Treatment* (Doctoral dissertation, Virginia Tech).

Gottfredson, D. C. (1987). An evaluation of an organization development approach to reducing school disorder. *Evaluation Review, 11*(6), 739-763.

Gottfredson, G. D., Jones, E. M., & Gore, T. W. (2002). Implementation and Evaluation of a Cognitive–Behavioral Intervention to Prevent Problem Behavior in a Disorganized School. *Prevention Science, 3*(1), 43-56. doi:10.1023/a:1014671310038

Griffin, J. P., Chen, D., Eubanks, A., Brantley, K. M., & Willis, L. A. (2007). A Randomized Violence Prevention Trial with Comparison: Responses by Gender. *Journal of School Violence, 6*(1), 65-81. doi:10.1300/J202v06n01_05

Grimes, S. (2015). *An evaluation of Aggression Replacement Training: the impact of a multi-component, CBT-based intervention on the problem behaviours, pro-social skills and moral development of pupils in English secondary schools.* University of Nottingham,

Guo, S., Wu, Q., Smokowski, P. R., Bacallao, M., Evans, C. B. R., & Cotter, K. L. (2015). A Longitudinal Evaluation of the Positive Action Program in a Low-Income, Racially Diverse, Rural County: Effects on Self-Esteem, School Hassles, Aggression, and Internalizing Symptoms. *Journal of Youth and Adolescence, 44*(12), 2337-2358. doi:10.1007/s10964-015-0358-1

Haataja, A., Voeten, M., Boulton, A. J., Ahtola, A., Poskiparta, E., & Salmivalli, C. (2014). The KiVa antibullying curriculum and outcome: Does fidelity matter?. *Journal of school psychology, 52*(5), 479-493.

Hains, A. A., Davies, W. H., Behrens, D., & Biller, J. A. (1997). *Cognitive behavioral interventions for adolescents with cystic fibrosis. Journal of pediatric psychology, 22*(5), 669-687.

Hammond, A. (2007). *Assessing the Need for and Impact of an Emotions Regulation Booster Program for Elementary School Aged Children* (Master's thesis, Wilfried Laurier university).

Hammond, W. R., & Yung, B. R. (1991). Preventing violence in at-risk African-American youth. *Journal of Health Care for the Poor and Underserved, 2*(3), 359-373.

Hanewinkel, R. (2004). Prevention of bullying in German schools: An evaluation of an anti-bullying approach. *Bullying in schools: How successful can interventions be*, 81-97.

Hansen, W. B., & Dusenbury, L. (2004). All Stars Plus: A competence and motivation enhancement approach to prevention. *Health Education, 104*(6), 371-381.

Harris-Madden, D. (2017). *Measuring the Effects of Youth Participation in a Government-Funded, Urban After-School Employment and Training Program: A Case Study Summative Evaluation.* Education Doctoral, 306.

Heaton, R., Safer, D., Allen, R., Spinnato, N., & Prumo, F. (1976). A motivational environment for behaviorally deviant junior high school students. *An official publication of the International Society for Research in Child and Adolescent Psychopathology, 4*(3), 263-275. doi:10.1007/BF00917763

Heinert, S., Del Rios, M., Arya, A., Amirsoltani, R., Quasim, N., Gehm, L., ... & Vanden Hoek, T. (2019). The CHAMPIONS NETWork: Training Chicago High School Students as Health Advocates to Improve Health Equity. *Health promotion practice, 20*(1), 57-66.

Heinze, J. E., Reischl, T. M., Bai, M., Roche, J. S., Morrel-Samuels, S., Cunningham, R. M., & Zimmerman, M. A. (2016). A comprehensive prevention approach to reducing assault offenses and assault injuries among youth. *Prevention science, 17*(2), 167-176.

Hemphill, S. A., & Littlefield, L. (2001). Evaluation of a short-term group therapy program for children with behavior problems and their parents. *Behaviour Research and Therapy, 39*(7), 823-841.

Hobbs, T. R., & Holt, M. M. (1976). The effects of token reinforcement on the behavior of delinquents in cottage settings. *Journal of Applied Behavior Analysis, 9*(2), 189-198. doi:10.1901/jaba.1976.9-189

Horton, J. K. (2008). *Pair counseling for high school students: Improving friendship skills, interpersonal relationships, and behavior among aggressive and withdrawn adolescents.* (3318937 Ph.D.), The College of William and Mary, Ann Arbor. Retrieved from https://search.proquest.com/docview/304446893?accountid=13828

Hoskins, D., Duncan, L. G., Moskowitz, J. T., & Ordonez, A. E. (2018). Positive Adaptations for Trauma and Healing (PATH), a Pilot Study of Group Therapy With Latino Youth. *Psychological Trauma-Theory Research Practice and Policy, 10*(2), 163-172. doi:10.1037/tra0000285

Hovell, M. F., Blumberg, E. J., Liles, S., Powell, L., Morrison, T. C., Duran, G., . . . Kelley, N. (2001). Training AIDS and anger prevention social skills in at-risk adolescents. *Journal of Counseling and Development, 79*(3), 347-355.

Howells, K., Day, A., Williamson, P., Bubner, S., Jauncey, S., Parker, A., & Heseltine, K. (2005). Brief anger management programs with offenders: Outcomes and predictors of change. *The Journal of Forensic Psychiatry & Psychology, 16*(2), 296-311.

Hudley, C. (April, 2001). *Perceived Behavioral and Academic Competence in Middle Childhood: Influences of a Community-Based Youth Development Program* [Paper presentation]. Annual Conference of the American Educational Research Association, Seattle, WA.

Humphrey, N., Kalambouka, A., Wigelsworth, M., Lendrum, A., Lennie, C., & Farrell, P. (2010). New Beginnings: Evaluation of a short social–Emotional intervention for primary-aged children. *Educational Psychology, 30*(5), 513-532.

Hutchings, J., & Clarkson, S. (2015). Introducing and piloting the KiVa bullying prevention programme in the UK. *Educ Child Psychol, 32*(1), 49-61.

Hutson, A., Bleland, K., & Douglass, J. (2016). School-Connect intervention impact on high school students' discipline referrals and academic outcomes. *Austin, TX: Agile Analytics*.

Jagers, R. J., Morgan-Lopez, A. A., & Flay, B. R. (2009). The impact of age and type of intervention on youth violent behaviors. *Journal of Primary Prevention, 30*(6), 642-658. doi:10.1007/s10935-009-0200-1

Jayman, M. (2017). *Evaluating the impact of a school-based intervention on the socio-emotional well-being and school performance of pupils in early secondary education* (Doctoral dissertation, University of West London).

Johnson, S. (2009). *Therapeutic mentoring: Outcomes for youth in foster care* (Doctoral dissertation, Loyola University Chicago).

Johnson, S. (2010). *The role of therapeutic mentoring in enhancing outcomes for youth in foster care*: kb.osu.edu.

Jones, L., Rhine, T., & Bratton, S. (2002). High school students as therapeutic agents with young children experiencing school adjustment difficulties: The effectiveness of a filial therapy training model. *International Journal of Play Therapy, 11*(2), 43.

Jones, T. S., & Carlin, D. (1994). *Philadelphia Peer Mediation Program: Report for 1992-1994 Period.*

Jordans, M. J., Tol, W. A., Susanty, D., Ntamatumba, P., Luitel, N. P., Komproe, I. H., & de Jong, J. T. (2013). Implementation of a mental health care package for children in areas of armed conflict: a case study from Burundi, Indonesia, Nepal, Sri Lanka, and Sudan. *PLoS medicine, 10*(1), e1001371.

Karataş, Z., & Gökçakan, Z. (2009). The Effect of Group-Based Psychodrama Therapy on Decreasing the Level of Aggression in Adolescents. *Turkish Journal of Psychiatry, 20*(4).

Kaya, F., & Buzlu, S. (2016). Effects of aggression replacement training on problem solving, anger and aggressive behaviour among adolescents with criminal attempts in Turkey: A quasi-experimental study. *Archives of psychiatric nursing, 30*(6), 729-735.

Keliat, B. A., Tololiu, T. A., Daulima, N. H. C., & Erawati, E. (2015). Effectiveness assertive training of bullying prevention among adolescents in west java Indonesia. *International Journal of Nursing, 2*(1), 128-134.

Kellner, M. H., Bry, B. H., & Colletti, L.-A. (2002). Teaching Anger Management Skills to Students with Severe Emotional or Behavioral Disorders. *Behavioral Disorders, 27*(4), 400-407. doi:10.1177/019874290202700407

Kellner, M. H., Bry, B. H., & Salvador, D. S. (2008). Anger Management Effects on Middle School Students with Emotional/Behavioral Disorders: Anger Log Use, Aggressive and Prosocial Behavior. *Child & Family Behavior Therapy, 30*(3), 215-230. doi:10.1080/07317100802275520

Kendall, A. D., Emerson, E. M., Hartmann, W. E., Zinbarg, R. E., & Donenberg, G. R. (2017). A two-week psychosocial intervention reduces future aggression and incarceration in clinically aggressive juvenile offenders. *Journal of the American Academy of Child & Adolescent Psychiatry, 56*(12), 1053-1061.

Kendall, P. C., & Braswell, L. (1982). Cognitive-Behavioral Self-Control Therapy for Children: A Components Analysis. *Journal of Consulting and Clinical Psychology, 50*(5), 672-689. doi:10.1037/0022-006X.50.5.672

Kimber, B., Sandell, R., & Bremberg, S. (2008). Social and emotional training in Swedish schools for the promotion of mental health: an effectiveness study of 5 years of intervention. *Health Education Research, 23*(6), 931-940. doi:10.1093/her/cyn040

Koegl, C. J., Farrington, D. P., Augimeri, L. K., & Day, D. M. (2008). Evaluation of a targeted cognitive-behavioral program for children with conduct problems - The SNAP® under 12 outreach project: Service intensity, age and gender effects on short- and long-term outcomes. *Clinical Child Psychology and Psychiatry, 13*(3), 419-434. doi:10.1177/1359104508090606

Kolko, D. J., Lindhiem, O., Hart, J., & Bukstein, O. G. (2014). Evaluation of a Booster Intervention Three Years After Acute Treatment for Early-Onset Disruptive Behavior Disorders. *Journal of Abnormal Child Psychology, 42*(3), 383-398. doi:10.1007/s10802-013-9724-1

Konkel, K. E. (2016). *Is a life skills training infusion an effective strategy to reduce substance use among at-risk teens in a mentoring program?* (Doctoral dissertation, Colorado State University. Libraries).

Lane, K. L., Wehby, J. H., Robertson, E. J., & Rogers, L. A. (2007). How do different types of high school students respond to schoolwide positive behavior support programs? Characteristics and responsiveness of teacher-identified students. *Journal of Emotional and Behavioral Disorders, 15*(1), 3-20.

Larson, J. D., Calamari, J. E., West, J. G., & Frevert, T. A. (1998). Aggression management with disruptive adolescents in the residential setting: Integration of a cognitive-behavioral component. *Residential Treatment for Children & Youth, 15*(4), 1-9.

Leboeuf, J. L. (2011). *Mentoring first-time and low-level delinquent adolescents: The impact of an on-campus mentoring program on sense of self and rule non-compliance* (Doctoral dissertation, Colorado State University).

Lee, E. J. (2015). The effect of positive group psychotherapy on self-esteem and state anger among adolescents at Korean immigrant churches. *Archives of psychiatric nursing, 29*(2), 108-113.

Leihua Van, S.-E., Frey, K. S., & Beland, K. (2002). Changing adolescents' attitudes about relational and physical aggression: An early evaluation of a school-based intervention. *School Psychology Review, 31*(2), 201.

Levas, M. N., Boyle, E. A., Melzer-Lange, M., & Panepinto, J. (2016). Improvement in quality of life among violently injured youth after a brief intervention. *Journal of Trauma and Acute Care Surgery, 81*(4), S61-S66.

Limber, S. P., Olweus, D., Wang, W., Masiello, M., & Breivik, K. (2018). Evaluation of the Olweus Bullying Prevention Program: A large scale study of US students in grades 3–11. *Journal of school psychology, 69*, 56-72.

Livings, J. E. (2017). Taking ACTion on anger: a feasibility study investigating the effectiveness and acceptability of an ACT-based anger intervention for adolescent males in a school-context (Doctoral dissertation, University of Surrey).

Lochman, J. E. (1992). Cognitive-behavioral intervention with aggressive boys: Three-year follow-up and preventive effects. *Journal of Consulting and Clinical Psychology, 60*(3), 426.

Lochman, J. E., Lampron, L. B., Gemmer, T. C., Harris, S. R., & Wyckoff, G. M. (1989). Teacher consultation and cognitive-behavioral interventions with aggressive boys. *Psychology in the Schools, 26*(2), 179-188. doi:10.1002/1520-6807(198904)26:2<179::AID-PITS2310260209>3.0.CO;2-Z

Lochman, J. E., Nelson, W. M., & Sims, J. P. (1981). A cognitive behavioral program for use with aggressive children. *Journal of Clinical Child Psychology, 10*(3), 146-148. doi:10.1080/15374418109533036

Luengo, P., Zuffianò, A., Gerbino, M., & Vecchio, G. (2014). Un modelo para la promoción del comportamiento prosocial en el contexto educativo: el programa CEPIDEAS. V. Mestre, P. Samper & A. Tur-Porcar (Coords.), *Desarrollo prosocial en las aulas. Propuestas para intervención.* Valencia, España: Edit. Tirant Humanidades.

Madsen, K. A., Hicks, K., & Thompson, H. (2011). Physical activity and positive youth development: Impact of a school-based program. *Journal of School Health, 81*(8), 462-470.

Marsh, K. A. (2009). *Bullying and peer victimisation from a social cognitive perspective: Development and evaluation of the Cool Schools program* (Doctoral Dissertation, Griffith University).

Marshall, J. H., Lawrence, E. C., & Peugh, J. (2013). College women mentoring adolescent girls: The relationship between mentor peer support and mentee outcomes. *Mentoring & Tutoring: Partnership in Learning, 21*(4), 444-462.

McClanahan, W. (2014). *Treatment and Program Effects in a Violence Reduction Program* (Doctoral Dissertation, University of Pennsylvania).

McLeod, D. A., Jones, R., & Cramer, E. P. (2015). An evaluation of a school-based, peer-facilitated, healthy relationship program for at-risk adolescents. *Children & Schools, 37*(2), 108-116.

Cuesta Medina, L., Hennig Manzuoli, C., Duque, L. A., & Malfasi, S. (2018). Cyberbullying: tackling the silent enemy. *International Journal of Inclusive Education*, 1-12.

Menesini, E., Codecasa, E., Benelli, B., & Cowie, H. (2003). Enhancing children's responsibility to take action against bullying: Evaluation of a befriending intervention in Italian middle schools. *Aggressive Behavior, 29*(1), 1-14.

Menesini, E., Nocentini, A., & Palladino, B. E. (2012). Empowering students against bullying and cyberbullying: Evaluation of an Italian peer-led model. *International Journal of Conflict and Violence (IJCV), 6*(2), 313-320.

Meyer, A., & Farrell, A. (1998). Social skills training to promote resilience and reduce violence in African American middle school students. *Education and Treatment of Children, 21*(4), 461-488.

Meyer, G., Roberto, A. J., Boster, F. J., & Roberto, H. L. (2004). Assessing the Get Real About Violence (R) curriculum: Process and outcome evaluation results and implications. *Health Communication, 16*(4), 451-474. doi:10.1207/s15327027hc1604_4

Miller, S., Williams, J., Cutbush, S., Gibbs, D., Clinton-Sherrod, M., & Jones, S. (2015). Evaluation of the Start Strong initiative: preventing teen dating violence and promoting healthy relationships among middle school students. *Journal of Adolescent Health, 56*(2), S14-S19.

Minhyo Cho, R., & Park, M. (2015). Analyzing the effectiveness of the Korean National anti-bullying program–WEE project. *International Review of Public Administration, 20*(3), 287-304.

Mitchell, P., Smedley, K., Kenning, C., McKee, A., Woods, D., Rennie, C. E., . . . Dolan, M. (2011). Cognitive behaviour therapy for adolescent offenders with mental health problems in custody. *Journal of Adolescence, 34*(3), 433-443. doi:10.1016/j.adolescence.2010.06.009

Mohammad, B. N., Somayeh, B., Mohsen, H., & Kobra, L. (2010). Immediate and Six-Month Outcomes of a School-Based Substance Prevention Program (Project TND) for Iranian High School Students. *Procedia-social and behavioral sciences, 5*, 1997-2001.

Moore, J., DeChillo, N., Nicholson, B., Genovese, A., & Sladen, S. (2000). Flashpoint: An Innovative Media Literacy Intervention For High-Risk Adolescents. *Juvenile and Family Court Journal, 51*(2), 23-34.

Morrissey, C. (1997). A Multimodal Approach to Controlling Inpatient Assaultiveness among Incarcerated Juveniles. *Journal of Offender Rehabilitation, 25*, 31-42.

Neace, W., Munoz, M., Olson-Allen, S., Weber, J., & Johnson, K. (April, 2003). *Pushing the Boundaries of Education: Evaluating the Impact of Research-Based Social Service Programs with Educational Performance Indicators* [Paper Presentation]. Annual meeting of the American Educational Research Association (AERA), San Diego, CA

Ngwe, J. E., Liu, L. C., Flay, B. R., & Segawa, E. (2004). Violence prevention among African American adolescent males. *American Journal of Health Behavior, 28*(SUPPL. 1), S24-S37.

Nitkowski, D., Petermann, F., Büttner, P., Krause-Leipoldt, C., & Petermann, U. (2009). Behavior Modification of Aggressive Children in Child Welfare. *Behavior Modification, 33*(4), 474-492. doi:10.1177/0145445509336700

Noel, K. K. (2011). *The effects of a narrative-based social problem-solving intervention with high-risk adolescent males.* (3504313 Ph.D.), The University of New Mexico, Ann Arbor. Retrieved from https://search.proquest.com/docview/1011473055?accountid=13828

O'Donnell, L., Stueve, A., San Doval, A., Duran, R., Atnafou, R., Haber, D., . . . Piessens, P. (1999). Violence prevention and young adolescents' participation in community youth service. *Journal of Adolescent Health, 24*(1), 28-37. doi:https://doi.org/10.1016/S1054-139X(98)00069-X

Olafson, E., Boat, B. W., Putnam, K. T., Thieken, L., Marrow, M. T., & Putnam, F. W. (2018). Implementing Trauma and Grief Component Therapy for Adolescents and Think Trauma for Traumatized Youth in Secure Juvenile Justice Settings. *Journal of Interpersonal Violence, 33*(16), 2537-2557. doi:10.1177/0886260516628287

Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. *The development and treatment of childhood aggression, 17*, 411-448.

Olweus, D. A., & Limber, S. P. (2010). The Olweus Bullying Prevention Program: Implementation and evaluation over two decades. In S.R. Jimerson, S.M. Swearer & D. L. Espelage (Eds.), *The handbook of bullying in schools: An internation perspective* (pp. 377-401). New York: Routledge.

Orpinas, P., Parcel, G. S., McAlister, A., & Frankowski, R. (1995). Violence prevention in middle schools: A pilot evaluation. *Journal of Adolescent Health, 17*(6), 360-371. doi:https://doi.org/10.1016/1054-139X(95)00194-W

Overbeek, M. M., de Schipper, J. C., Lamers-Winkelman, F., & Schuengel, C. (2012). The effectiveness of a trauma-focused psycho-educational secondary prevention program for children exposed to interparental violence: Study protocol for a randomized controlled trial. *Trials, 13*. doi:10.1186/1745-6215-13-12

Öz, F. S., & Aysan, F. (2011). The Effect of Anger Management Training on Anger Coping and Communication Skills of Adolescents. *International Online Journal of Educational Sciences, 3*(1).

Palladino, B. E., Nocentini, A., & Menesini, E. (2012). Online and offline peer led models against bullying and cyberbullying. *Psicothema, 24*(4).

Palladino, B. E., Nocentini, A., & Menesini, E. (2016). Evidence-based intervention against bullying and cyberbullying: Evaluation of the NoTrap! program in two independent trials. *Aggressive Behavior, 42*(2), 194-206.

Patel, M. M., Liddell, J. L., & Ferreira, R. J. (2018). An Evaluation of the Positive Action Program for Youth Violence Prevention: From Schools to Summer Camps. *Child and Adolescent Social Work Journal, 35*(5), 519-530. doi:10.1007/s10560-018-0536-6

Peltonen, K., Qouta, S., El Sarraj, E., & Punamäki, R.-L. (2012). Effectiveness of School-Based Intervention in Enhancing Mental Health and Social Functioning Among War-Affected Children. *Traumatology, 18*(4), 37-46. doi:10.1177/1534765612437380

Pentz, M. A., Dwyer, J. H., MacKinnon, D. P., Flay, B. R., Hansen, W. B., Wang, E. Y. I., & Johnson, C. A. (1992). A multicommunity trial for primary prevention of adolescent drug abuse: Effects on drug use prevalence. *Annual Review of Addictions Research and Treatment, 2*(C), 489-502.

Pepler, D. J., King, G., & Byrd, W. (1991). A Social-cognitively Based Social Skills Training Programme for Aggressive Children. In D. J. Pepler and K. H. Rubin (Eds.), *The Development and Treatment of Childhood Aggression.* Hillsdale, NJ: Erlbaum.

Phillips, E. L. (1968). ACHIEVEMENT PLACE: TOKEN REINFORCEMENT PROCEDURES IN A HOME-STYLE REHABILITATION SETTING FOR "PREDELINQUENT" BOYS. *Journal of Applied Behavior Analysis, 1*(3), 213-223. doi:10.1901/jaba.1968.1-213

Poulin, F., Dishion, T. J., & Burraston, B. (2001). 3-year iatrogenic effects associated with aggregating high-risk adolescents in cognitive-behavioral preventive interventions. *Applied developmental science, 5*(4), 214-224.

Rawana, J. S., Norwood, S. J., & Whitley, J. (2011). A mixed-method evaluation of a strength-based bullying prevention program. *Canadian Journal of School Psychology, 26*(4), 283-300.

Reidy, D. E., Holland, K. M., Cortina, K., Ball, B., & Rosenbluth, B. (2017). Evaluation of the expect respect support group program: A violence prevention strategy for youth exposed to violence. *Preventive medicine, 100*, 235-242.

Renshaw, T. L. (2011). *Effects of the Promoting Positive Peer Relationships—ClassroomResource on Student Attitudes Toward Bullying and Perceptions ofSchool Bullying Supports* (Doctoral Dissertation, University of California, Santa Barbara).

Rey Alamillo, R. d., Casas Bolaños, J. A., & Ortega Ruiz, R. (2012). El programa ConRed, una práctica basada en la evidencia. *Comunicar*(39), 129-138.

Ringwalt, C. L., Pankratz, M. M., Hansen, W. B., Dusenbury, L., Jackson-Newsom, J., Giles, S. M., & Brodish, P. H. (2009). The potential of coaching as a strategy to improve the effectiveness of school-based substance use prevention curricula. *Health Education & Behavior, 36*(4), 696-710.

Rivera, J. P., Reynoso, T. M., & Vilchis, R. M. (2018). Efectos de un programa de ciberconvivencia en la prevención del cyberbullying. *Psychology, Society & Education, 10*(2), 239-250.

Rollin, S. A., Rubin, R. I., Shelby, T. L., Holland-Gorman, J. L., Kourofsky, H. R., Arnold, A., . . . Santorsola, J. (April, 2000). Coping in Children and Adolescents: Project KICK--A Primary Prevention Model [Paper presentation]. Annual Conference of the American Educational Research Association, New Orleans, LA.

Rosenberg, S. L. (2002). Positive peers-Differential impact of a social intervention strategy on four personality subgroups. *School Psychology International, 23*(4), 397-415.

Rousseau, C., Drapeau, A., Lacroix, L., Bagilishya, D., & Heusch, N. (2005). Evaluation of a classroom program of creative expression workshops for refugee and immigrant

children. *Journal of Child Psychology and Psychiatry, 46*(2), 180-185. doi:10.1111/j.1469-7610.2004.00344.x

Ruiz, S. Y., Rodriguez, S., & Zavala, G. M. (2007). Evaluation of a Longitudinal Six-Site Pilot Study of a Mentoring Program for Latina Girls: Results and Recommendations. *Harvard Journal of Hispanic Policy, 19*, 57-72.

Salmivalli, C., Kaukiainen, A., & Voeten, M. (2005). Anti-bullying intervention: Implementation and outcome. *British Journal of Educational Psychology, 75*(3), 465-487.

Salz, A., & Trubowitz, J. (1992). You can see the sky from here: The Queens College Big Buddy program. *Phi Delta Kappan, 73*(7), 551.

Sands, M. (2012). *The impact of a peer leadership program on high school students' social capital, as measured by co-cognitive factors of the renzulli houndstooth theory* (Doctoral dissertation, Western Connecticut State University).

Santisteban, D. A., Perez-Vidal, A., Coatsworth, J. D., Kurtines, W. M., Schwartz, S. J., LaPerriere, A., & Szapocznik, J. (2003). Efficacy of brief strategic family therapy in modifying hispanic adolescent behavior problems and substance use. *Journal of Family Psychology, 17*(1), 121-133. doi:10.1037//0893-3200.17.1.121

Sawyer, A. M., & Borduin, C. M. (2011). Effects of multisystemic therapy through midlife: A 21.9-year follow-up to a randomized clinical trial with serious and violent juvenile offenders. *Journal of Consulting and Clinical Psychology, 79*(5), 643-652. doi:10.1037/a0024862

Schmid, H. (2006). Smokefree class competition in Switzerland: does it work with negative peer pressure. *Psychol Health*, 176-177.

Schnitzer, G., Andries, C., & Lebeer, J. (2007). Usefulness of cognitive intervention programmes for socio-emotional and behaviour problems in children with learning disabilities. *Journal of Research in Special Educational Needs, 7*(3), 161-171.

Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., Oberlander, T. F., & Diamond, A. (2015). Enhancing Cognitive and Social-Emotional Development through a Simple-to-Administer Mindfulness-Based School Program for Elementary School Children: A Randomized Controlled Trial. *Developmental Psychology, 51*(1), 52-66. doi:10.1037/a0038454

Schonert-Reichl, K. A., Smith, V., Zaidman-Zait, A., & Hertzman, C. (2012). Promoting Children's Prosocial Behaviors in School: Impact of the "Roots of Empathy" Program on the Social and Emotional Competence of School-Aged Children. *School Mental Health, 4*(1), 1-21. doi:10.1007/s12310-011-9064-7

Schwartz, C. M., & Campbell, T. (1996). Juvenile Violence Prevention: The Evaluation of a Comprehensive, Cognitive-Behavioral Program. *Journal of Applied Sociology, 13*(1), 77-103.

Seagram, B. (1997). *The efficacy of solution-focused therapy with young offenders* (Doctoral Dissertation, York University).

Segawa, E., Ngwe, J. E., Li, Y., & Flay, B. R. (2005). Evaluation of the Effects of the Aban Aya Youth Project in Reducing Violence among African American Adolescent Males Using Latent Class Growth Mixture Modeling Techniques. *Evaluation Review, 29*(2), 128-148. doi:10.1177/0193841X04271095

Shaheen, M. M. A., & Oppenheim, S. (2016). Youth resilience makes a difference in mitigating stress: teacher mediated school intervention in Bethlehem. *Intervention-*

International Journal of Mental Health Psychosocial Work and Counselling in Areas of Armed Conflict, 14(3), 305-319.

Shapiro, J. P., Burgoon, J. D., Welker, C. J., & Clough, J. B. (2002). Evaluation of the peacemakers program: School-based violence prevention for students in grades four through eight. *Psychology in the Schools, 39*(1), 87-100.

Shechtman, Z. (2003). Therapeutic factors and outcomes in group and individual therapy of aggressive boys. *Group Dynamics: Theory, Research, and Practice, 7*(3), 225.

Shechtman, Z., & Tutian, R. (2017). Feedback to semi-professional counselors in treating child aggression. *Psychotherapy research, 27*(3), 338-349.

Shore, M. F., & Massimo, J. L. (1966). Comprehensive vocationally oriented psychotherapy for adolescent delinquent boys: A follow-up study. *American Journal of Orthopsychiatry, 3*6(4), 609.

Shulman, L., & Maguin, E. (2017). The VISA center: an interdisciplinary collaboration serving students suspended from school for violent or aggressive behavior, substance abuse, or weapons possession. *Children & Schools, 39*(4), 201-208.

Silva, J. L. D., Oliveira, W. A. D., Carlos, D. M., Lizzi, E. A. D. S., Rosário, R., & Silva, M. A. I. (2018). *Intervention in social skills and bullying. Revista brasileira de enfermagem, 71*(3), 1085-1091.

Skinns, L., & Hough, M. (2009). An Evaluation of Bristol RAiS. *London: ICPR, King's College London*.

Skradski, S. (2001). *Effect of Life Skills Training with Male Youth Who Are Prone to Aggression* (Master's Thesis, University of Nebraska at Omaha).

Smith, A. (2015). *Bullying resilience: Informing schools and communities to transform conflict by using an anti-bullying restorative justice campaign* (Doctoral dissertation, Capella University).

Smith, F. (2014). *The impact of school-based Aggression Replacement Training on emotion regulation and aggressive behaviour* (Doctoral Dissertation, Massey University, Wellington, New Zealand).

Smokowski, P. R., Guo, S., Wu, Q., Evans, C. B. R., Cotter, K. L., & Bacallao, M. (2016). Evaluating Dosage Effects for the Positive Action Program: How Implementation Impacts Internalizing Symptoms, Aggression, School Hassles, and Self-Esteem. *American Journal of Orthopsychiatry, 86*(3), 310-322. doi:10.1037/ort0000167

Stan, C., & Beldean, I. G. (2014). The development of social and emotional skills of students-ways to reduce the frequency of bullying-type events. Experimental results. *Procedia-social and behavioral sciences, 114*, 735-743.

Steiner, N. J., Sidhu, T. K., Pop, P. G., Frenette, E. C., & Perrin, E. C. (2013). Yoga in an urban school for children with emotional and behavioral disorders: A feasibility study. *Journal of Child and Family Studies, 22*(6), 815-826.

Stevens, S., Leybas-Amedia, V., Bourdeau, B., McMichael, L., & Nyitray, A. (2006). Blending prevention models: An effective substance use and HIV prevention program for minority youth. *Child and Adolescent Social Work Journal, 23*(1), 4.

Suh, E. (2015). *The Use of Therapeutic Group Drumming with Korean Middle School Students in School Violence Prevention Programs* (Doctoral Dissertation, Lesley University).

Sussman, S., Dent, C., Simon, T., Stacy, A., Galaif, E., Moss, M., . . . Johnson, C. (1995). Effectiveness of social influence substance abuse prevention curricula in comprehensive and continuation high schools. *Drugs and Society, 8*, 65-81.

Swenson, C. C., & Kennedy, W. A. (1995). Perceived Control and Treatment Outcome with Chronic Adolescent Offenders. *Adolescence, 30*(119), 565.

Tarling, R., Davison, T., & Clarke, A. (2004). *Mentoring projects*. Youth Justice Board.

Thompson, K. L., Bundy, K. A., & Broncheau, C. (1995). Social skills training for young adolescents: Symbolic and behavioral components. *Adolescence, 30*(119), 723-735.

Thompson, K. L., Bundy, K. A., & Wolfe, W. R. (1996). Social skills training for young adolescents: Cognitive and performance components. *Adolescence, 31*(123), 505.

Tierney, J. P., & Branch, A. Y. (1992). *College Students as Mentors for At-Risk Youth: A Study of Six Campus Partners in Learning Programs.*

Tisdelle, D. A., & Lawrence, J. S. S. (1988). Adolescent interpersonal problem-solving skill training: Social validation and generalization. *Behavior Therapy, 19*(2), 171-182.

Trip, S., Bora, C., Sipos-Gug, S., Tocai, I., Gradinger, P., Yanagida, T., & Strohmeier, D. (2015). Bullying prevention in schools by targeting cognitions, emotions, and behavior: Evaluating the effectiveness of the REBE-ViSC program. *Journal of counseling psychology, 62*(4), 732.

Trupin, E. W., Stewart, D. G., Beach, B., & Boesky, L. (2002). Effectiveness of a dialectical behaviour therapy program for incarcerated female juvenile offenders. *Child and Adolescent Mental Health, 7*(3), 121-127.

Valliant, P. M., Jensen, B., & Raven-Brook, L. (1995). Brief cognitive behavioural therapy with male adolescent offenders in open custody or on probation: An evaluation of management of anger. *Psychological Reports, 76*(3), 1056-1058.

Vázquez, A. J. (2009). Videos contra el acoso escolar (bullying). Pixel-Bit. Revista de Medios y Educación, (34), 95-104.

Viafora, D. P., Mathiesen, S. G., & Unsworth, S. J. (2015). Teaching mindfulness to middle school students and homeless youth in school classrooms. *Journal of Child and Family Studies, 24*(5), 1179-1191.

Visser, M. M., Telman, M. D., de Schipper, J. C., Lamers-Winkelman, F., Schuengel, C., & Finkenauer, C. (2015). The effects of parental components in a trauma-focused cognitive behavioral based therapy for children exposed to interparental violence: Study protocol for a randomized controlled trial. *BMC Psychiatry, 15*.

Webb, L., Perry-Parrish, C., Ellen, J., & Sibinga, E. (2018). Mindfulness instruction for HIV-infected youth: a randomized controlled trial. *AIDS Care - Psychological and Socio-Medical Aspects of AIDS/HIV, 30*(6), 688-695. doi:10.1080/09540121.2017.1394434

Weis, R., Wilson, N. L., & Whitemarsh, S. M. (2005). Evaluation of a Voluntary, Military-Style Residential Treatment Program for Adolescents With Academic and Conduct Problems. *Journal of Clinical Child & Adolescent Psychology, 34*(4), 692-705. doi:10.1207/s15374424jccp3404_11

Whiting, S. M. A., & Mallory, J. E. (2007). A longitudinal study to determine the effects of mentoring on middle school youngsters by nursing and other college students. *Journal of Child and Adolescent Psychiatric Nursing, 20*(4), 197-208. doi:10.1111/j.1744-6171.2007.00119.x

Williams, J., Miller, S., Cutbush, S., Gibbs, D., Clinton-Sherrod, M., & Jones, S. (2015). A latent transition model of the effects of a teen dating violence prevention initiative. *Journal of Adolescent Health, 56*(2), S27-S32.

Wise, K. L., Bundy, K. A., Bundy, E. A., & Wise, L. A. (1991). Social skills training for young adolescents. *Adolescence, 26*(101), 233.

Wolf, M. M., Giles, D. K., & Hall, R. V. (1968). Experiments with token reinforcement in a remedial classroom. *Behaviour Research and Therapy, 6*(1), 51-64. doi:10.1016/0005-7967(68)90042-9

Wölfer, R., Schultze-Krumbholz, A., Zagorscak, P., Jäkel, A., Göbel, K., & Scheithauer, H. (2014). Prevention 2.0: targeting cyberbullying @ school. *Prevention science : the official journal of the Society for Prevention Research, 15*(6), 879-887.

Wong, D. S., Cheng, C. H., Ngan, R. M., & Ma, S. K. (2011). Program effectiveness of a restorative whole-school approach for tackling school bullying in Hong Kong. *International Journal of Offender Therapy and Comparative Criminology, 55*(6), 846-862.

Wongtongkam, N., Ward, P., Day, A., & Winefield, A. (2014). A Trial of Mindfulness Meditation to Reduce Anger and Violence in Thai Youth. *International Journal of Mental Health and Addiction, 12*(2), 169-180. doi:10.1007/s11469-013-9463-0

Woodbury, C. (2004). *Multiple Mentors and Family Involvement in Mentoring At-Risk Youth*: digitalcommons.usu.edu.

Worden, J. K., Flynn, B. S., Solomon, L. J., Secker-Walker, R. H., Badger, G. J., & Carpenter, J. H. (1996). Using mass media to prevent cigarette smoking among adolescent girls. *Health Education Quarterly, 23*(4), 453-468.

Wright, R., John, L., Duku, E., Burgos, G., Krygsman, A., & Esposto, C. (2010). After-school programs as a prosocial setting for bonding between peers. *Child & Youth Services, 31*(3-4), 74-91.

Wright, R., John, L., Livingstone, A. M., Shepherd, N., & Duku, E. (2007). Effects of school-based interventions on secondary school students with high and low risks for antisocial behaviour. *Canadian Journal of School Psychology, 22*(1), 32-49.

Yaakub, N. F., Haron, F., & Leong, G. C. (2010). Examining the efficacy of the Olweus prevention programme in reducing bullying: the Malaysian experience. *Procedia-social and behavioral sciences, 5,* 595-598.

Yalçın, M., Görgü, N., Tokgünaydın, S., & Sütcü, S. (Septmeber, 2016). *Effectiveness of a cognitive behavioral group therapy for anger and aggression in juvenile delinquents* [Paper presentation]. 46th European Association for Behavioral and Cognitive Therapies Congress, Stockholm, Sweeden. DOI: 10.13140/RG.2.2.15816.93445

Yılmaz, D., & Ersever, O. G. (2015). The Effects of the Anger Management Program and the Group Counseling on the Anger Management Skills of Adolescents. *Online Journal of Counseling & Education, 4*(4).

Yokoo, M., Wakuta, M., & Shimizu, E. (2018). Educational effectiveness of a video lesson for bullying prevention. *Children & Schools, 40*(2), 71-79.

Zucker, M., Spinazzola, J., Pollack, A. A., Pepe, L., Barry, S., Zhang, L., & Van der Kolk, B. (2010). Getting teachers in on the act: Evaluation of a theater-and classroom-based youth violence prevention program. *Journal of School Violence, 9*(2), 117-135.

Reason of exclusion: none of the outcome measures is a behavioural measure of physical aggression

Abebe, K. Z., Jones, K. A., Culyba, A. J., Feliz, N. B., Anderson, H., Torres, I., ... & Detchon, A. (2018). Engendering healthy masculinities to prevent sexual violence: Rationale for and design of the Manhood 2.0 trial. Contemporary clinical trials, 71, 18-32.

Ahmad, M., Amjad, N., Rafique, R., & Anjum, A. (2016). Efficacy of cognitive behavior therapy in managing behavioral problems of slow learner children. *Pakistan Journal of Clinical Psychology, 15*(1).

Anderson, R., Ukoumunne, O. C., Sayal, K., Phillips, R., Taylor, J. A., Spears, M., ... & Stallard, P. (2014). Cost-effectiveness of classroom-based cognitive behaviour therapy in reducing symptoms of depression in adolescents: a trial-based analysis. *Journal of child psychology and psychiatry, 55*(12), 1390-1397.

Anlı, G., & Şar, A. H. (2017). The Effectof Cognitive Behavioral Psychoeducation Program, Which Aims to Reduce the Submissive Behaviors on the Interpersonal Sensitivity and Hostility. *Education & Science/Egitim ve Bilim, 42*(192).

Arbuthnot, J., & Gordon, D. A. (1986). Behavioral and cognitive effects of a moral reasoning development intervention for high-risk behavior-disordered adolescents. *Journal of Consulting and Clinical Psychology, 54*(2), 208-216.

Baker, F., & Jones, C. (2006). The effect of music therapy services on classroom behaviours of newly arrived refugee students in Australia - A pilot study. *Emotional and Behavioural Difficulties, 11*(4), 249-260. doi:10.1080/13632750601022170

Bate, S. (2007). *Mixed methods mediation analysis: Method and application to a tobacco prevention program evaluation* (Doctoral Dissertation. Arizona State University).

Bell, R. M., Ellickson, P. L., & Harrison, E. R. (1993). Do drug prevention effects persist into high-school? How project ALERT did with ninth graders. *Preventive Medicine, 22*(4), 463-483.

Bienert, H., & Schneider, B. H. (1995). Deficit-specific social skills training with peer-nominated aggressive-disruptive and sensitive-isolated preadolescents. *Journal of Clinical Child Psychology, 24*(3), 287-299. doi:10.1207/s15374424jccp2403_6

Boekeloo, B. O., Jerry, J., Lee-Ougo, W. I., Worrell, K. D., Hamburger, E. K., Russek-Cohen, E., & Snyder, M. H. (2004). Randomized trial of brief office-based interventions to reduce adolescent alcohol use. *Archives of pediatrics & adolescent medicine, 158*(7), 635-642.

Bond, L., & Butler, H. (2010). The Gatehouse Project: a multi-level integrated approach to promoting wellbeing in schools. *Evidence-based public health: effectiveness and efficiency*, 250-269.

Bond, L., Patton, G., Glover, S., Carlin, J. B., Butler, H., Thomas, L., & Bowes, G. (2004). The Gatehouse Project: can a multilevel school intervention affect emotional wellbeing and health risk behaviours? *Journal of Epidemiology and Community Health, 58*(12), 997. doi:10.1136/jech.2003.009449

Bonell, C., Allen, E., Christie, D., Elbourne, D., Fletcher, A., Grieve, R., . . . Viner, R. M. (2014). Initiating change locally in bullying and aggression through the school environment (INCLUSIVE): Study protocol for a cluster randomised controlled trial. *Trials, 15*(1). doi:10.1186/1745-6215-15-381

Bosworth, K., Gustafson, D. H., Hawkins, R. P., & Group, B. R. (1994). The BARN system: Use and impact of adolescent health promotion via computer. *Computers in Human Behavior, 10*(4), 467-482.

Botvin, G. J., Baker, E., Dusenbury, L., Tortu, S., & Botvin, E. M. (1990). Preventing adolescent drug abuse through a multimodal cognitive-behavioral approach: Results of a 3-year study. *Journal of Consulting and Clinical Psychology, 58*(4), 437.

Britton, W. B., Lepp, N. E., Niles, H. F., Rocha, T., Fisher, N. E., & Gold, J. S. (2014). A randomized controlled pilot trial of classroom-based mindfulness meditation compared to an active control condition in sixth-grade children. *Journal of School Psychology, 52*(3), 263-278. doi:10.1016/j.jsp.2014.03.002

Bui, H. T., Mackie, L., Hoang, P. A., & Tran, T. T. (2020). Exploring the effectiveness of cognitive behavioral therapy for Vietnamese adolescents with anger problems. *Kasetsart Journal of Social Sciences, 41*(1), 147-151.

Bundy, A., McWhirter, P. T., & McWhirter, J. J. (2011). Anger and violence prevention: Enhancing treatment effects through booster sessions. *Education and Treatment of Children*, 1-14.

Byrne, S. (2009). Media Literacy Interventions: What Makes Them Boom or Boomerang? *Communication Education, 58*(1), 1-14. doi:10.1080/03634520802226444

Campbell, R., Starkey, F., Holliday, J., Audrey, S., Bloor, M., Parry-Langdon, N., . . . Moore, L. (2008). An informal school-based peer-led intervention for smoking prevention in adolescence (ASSIST): a cluster randomised trial. *The Lancet, 371*(9624), 1595-1602.

Carney, M. M., & Buttell, F. (2003). Reducing juvenile recidivism: Evaluating the wraparound services model. *Research on social work practice, 13*(5), 551-568.

Cevasco, M., Jones, J., Kerns, S., Schwarz, I., & Spieker, S. (2017). Examining the Social Emotional Impact of a Brief Mindfulness Program for Students in Special Education (Doctoral dissertation, University of Washington).

Chamberland, A., Cantin-Drouin, M., & Damant, D. (2014). Assessment of the impact of saisir: A dating violence prevention program. *Canadian Social Work Review, 31*(1), 125.

Chandler, M. J. (1973). Egocentrism and antisocial behavior: The assessment and training of social perspective-taking skills. *Developmental Psychology, 9*(3), 326-332. doi:10.1037/h0034974

Connolly, J., Josephson, W., Schnoll, J., Simkins-Strong, E., Pepler, D., MacPherson, A., ... & Jiang, D. (2015). Evaluation of a youth-led program for preventing bullying, sexual harassment, and dating aggression in middle schools. *The Journal of Early Adolescence, 35*(3), 403-434.

Covault, T. J. (1973). *The application of value clarification teaching strategies with fifth grade students to investigate their influence on students' self-concept and related classroom coping and interacting behaviors* (Doctoral dissertation, The Ohio State University).

Crombach, A., & Elbert, T. (2015). Controlling Offensive Behavior Using Narrative Exposure Therapy: A Randomized Controlled Trial of Former Street Children. *Clinical Psychological Science, 3*(2), 270-282. doi:10.1177/2167702614534239

Crooks, C. V., Scott, K. L., Broll, R., Zwarych, S., Hughes, R., & Wolfe, D. A. (2015). Does an evidence-based healthy relationships program for 9th graders show similar effects for 7th and 8th graders? Results from 57 schools randomized to intervention. *Health Education Research, 30*(3), 513-519. doi:10.1093/her/cyv014

Cross, D., Barnes, A., Papageorgiou, A., Hadwen, K., Hearn, L., & Lester, L. (2015). A social-ecological framework for understanding and reducing cyberbullying

behaviours. *Aggression and Violent Behavior, 23*, 109-117. doi:10.1016/j.avb.2015.05.016

Cross, D., Shaw, T., Hadwen, K., Cardoso, P., Slee, P., Roberts, C., . . . Barnes, A. (2016). Longitudinal impact of the Cyber Friendly Schools program on adolescents' cyberbullying behavior. *Aggressive Behavior, 42*(2), 166-180. doi:10.1002/ab.21609

Cunningham, R. M., Chermack, S. T., Ehrlich, P. F., Carter, P. M., Booth, B. M., Blow, F. C., ... & Walton, M. A. (2015). Alcohol interventions among underage drinkers in the ED: a randomized controlled trial. *Pediatrics, 136*(4), e783-e793.

Deffenbacher, J. L., & et al. (1996). Anger Reduction in Early Adolescents. *Journal of Counseling Psychology, 43*(2), 149-157. doi:10.1037/0022-0167.43.2.149

Devries, K., Kuper, H., Knight, L., Allen, E., Kyegombe, N., Banks, L. M., . . . Naker, D. (2018). Reducing Physical Violence Toward Primary School Students With Disabilities. *Journal of Adolescent Health, 62*(3), 303-310. doi:10.1016/j.jadohealth.2017.09.004

Dolan, P., Brady, B., O'Regan, C., Russell, D., Canavan, J., & Forkan, C. (2011*). Big Brothers Big Sisters of Ireland: Evaluation Study. Report 1: Randomised Control Trial and Implementation Report.* Galway: Child & Family Research Centre.

Doumas, D. M., Hausheer, R., & Esp, S. (2016). Age of drinking initiation as a moderator of the efficacy of a brief, web-based personalized feedback alcohol intervention. *Journal of Child & Adolescent Substance Abuse, 25*(6), 591-597.

DuBois, D. L., & Keller, T. E. (2017). Investigation of the integration of supports for youth thriving into a community-based mentoring program. *Child development, 88*(5), 1480-1491.

Džaferović, M. (2018). The effects of implementing a program of nonviolent communication on the causes and frequency of conflicts among students. *Teme-Časopis za Društvene Nauke, 42*(1), 57-74.

Esbensen, F.-A., Peterson, D., Taylor, T. J., Freng, A., Osgood, D. W., Carson, D. C., & Matsuda, K. N. (2011). Evaluation and Evolution of the Gang Resistance Education and Training (G.R.E.A.T.) Program. *Journal of School Violence, 10*(1), 53-70. doi:10.1080/15388220.2010.519374

Esbensen, F.-A., Peterson, D., Taylor, T. J., & Osgood, D. W. (2012). Results from a multi-site evaluation of the GREAT program. *Justice Quarterly, 29*(1), 125-151.

Eslami, A. A., Ghofranipour, F., Bonab, B. G., Zadeh, D. S., Shokravi, F. A., & Tabatabaie, M. G. (2015). Evaluation of a school-based educational program to prevent adolescents' problem behaviors. *Journal of education and health promotion, 4.*

Evans, C. M. G. (1999). *The effects of writing about traumatic experiences on adolescents identified as emotionally disturbed (ED)* (Doctoral dissertation, Texas Woman's University).

Feindler, E., Marriott, S., & Iwata, M. (1984). Group Anger Control Training for junior high school delinquents. *Cognitive Therapy and Research, 8*(3), 299-311. doi:10.1007/BF01173000

Frank, J. L., Kohler, K., Peal, A., & Bose, B. (2017). Effectiveness of a school-based yoga program on adolescent mental health and school performance: Findings from a randomized controlled trial. *Mindfulness, 8*(3), 544-553.

Gallant, M. D., & Lafreniere, K. D. (2003). Effects of an emotional disclosure writing task on the physical and psychological functioning of children of alcoholics. *Alcoholism Treatment Quarterly, 21*(4), 55-66.

Garaigordobil, M., Maganto, C., Pérez, J. I., & Sansinenea, E. (2009). Gender Differences in Socioemotional Factors During Adolescence and Effects of a Violence Prevention Program. *Journal of Adolescent Health, 44*(5), 468-477. doi:10.1016/j.jadohealth.2008.09.014

Garaigordobil, M., & Martínez-Valderrey, V. (2015). The effectiveness of Cyberprogram 2.0 on conflict resolution strategies and self-esteem. *Journal of Adolescent Health, 57*(2), 229-234.

Garandeau, C. F., Poskiparta, E., & Salmivalli, C. (2014). Tackling acute cases of school bullying in the KiVa anti-bullying program: A comparison of two approaches. *Journal of Abnormal Child Psychology, 42*(6), 981-991. doi:10.1007/s10802-014-9861-1

Gelber, A., Isen, A., & Kessler, J. (2015, January 25). *Youth employment and summer employment programmes*. Retrieved from: https://voxeu.org/article/youth-employment-and-summer-employment-programmes

Gelber, A., Isen, A., & Kessler, J. B. (2014). *The effects of youth employment: Evidence from new york city summer youth employment program lotteries* (No. w20810). National Bureau of Economic Research.

Gelber, A., Isen, A., & Kessler, J. B. (2015). The effects of youth employment: Evidence from New York City lotteries. *The Quarterly Journal of Economics, 131*(1), 423-460.

Gill, C., Weisburd, D., Vitter, Z., Shader, C. G., Nelson-Zagar, T., & Spain, L. (2018). Collaborative problem-solving at youth crime hot spots: a pilot study. *Policing-an International Journal of Police Strategies & Management, 41*(3), 325-338. doi:10.1108/pijpsm-12-2017-0152

Gillen, C. T. A. (2018). *Psychopathic Traits, Substance Use, And Motivation to Change: The Effectiveness of Motivational Interviewing with At-Risk Adolescents.* (10277869 Ph.D.), The University of Southern Mississippi, Ann Arbor. Retrieved from https://search.proquest.com/docview/1897447890?accountid=13828

Glick, B., & Goldstein, A. P. (1987). Aggression Replacement Training. *Journal of Counseling & Development, 65*(7), 356-362. doi:10.1002/j.1556-6676.1987.tb00730.x

Gottfredson, D., Cross, A. B., Wilson, D., Rorie, M., & Connell, N. (2010). Effects of participation in after-school programs for middle school students: A randomized trial. *Journal of Research on Educational Effectiveness, 3*(3), 282-313.

Greenbaum, C. A., & Javdani, S. (2017). Expressive writing intervention promotes resilience among juvenile justice-involved youth. *Children and Youth Services Review, 73*, 220-229.

Grenard, J. L., Ames, S. L., Wiers, R. W., Thush, C., Stacy, A. W., & Sussman, S. (2007). Brief intervention for substance use among at-risk adolescents: A pilot study. *Journal of Adolescent Health, 40*(2), 188-191.

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American journal of community psychology, 30*(2), 199-219.

Gundersen, K., & Svartdal, F. (2006). Aggression replacement training in Norway: Outcome evaluation of 11 Norwegian student projects. *Scandinavian Journal of Educational Research, 50*(1), 63-81. doi:10.1080/00313830500372059

Gundersen, K., & Svartdal, F. (2010). Diffusion of treatment interventions: exploration of 'secondary' treatment diffusion. *Psychology, Crime & Law, 16*(3), 233-249. doi:10.1080/10683160802612924

HAINS, A. A. (1992). Comparison of Cognitive-Behavioral Stress Management Techniques With Adolescent Boys. *Journal of Counseling & Development, 70*(5), 600-605. doi:doi:10.1002/j.1556-6676.1992.tb01668.x

Hains, A. A. (1992). A stress inoculation training program for adolescents in a high school setting: a multiple baseline approach. *Journal of Adolescence, 15*(2), 163-175. doi:https://doi.org/10.1016/0140-1971(92)90045-7

Hains, A. A., & Ellmann, S. W. (1994). Stress inoculation training as a preventative intervention for high school youths. *Journal of Cognitive Psychotherapy, 8*(3), 219-232.

Hains, A. A., & Szyjakowski, M. (1990). A cognitive stress-reduction intervention program for adolescents. *Journal of Counseling Psychology, 37*(1), 79.

Hallfors, D., Cho, H., Sanchez, V., Khatapoush, S., Hyung, M. K., & Bauer, D. (2006). Efficacy vs effectiveness trial results of an indicated "model" substance abuse program: Implications for public health. *American Journal of Public Health, 96*(12), 2254-2259. doi:10.2105/AJPH.2005.067462

Harwood, A., & Radoff, S. (2009). Reciprocal benefits of mentoring. *Creating our identities in service-learning and community engagement,* 159.

Hawkins, J. D., Jenson, J. M., Catalano, R. F., & Wells, E. A. (1991). Effects of a Skills Training Intervention With Juvenile Delinquents. *Research on Social Work Practice, 1*(2), 107-121. doi:10.1177/104973159100100201

Hay, C., Wang, X., Ciaravolo, E., & Meldrum, R. C. (2015). Inside the black box: Identifying the variables that mediate the effects of an experimental intervention for adolescents. *Crime & Delinquency, 61*(2), 243-270.

Heller, S., Pollack, H. A., Ander, R., & Ludwig, J. (2013). *Preventing youth violence and dropout: A randomized field experiment* (No. w19014). National Bureau of Economic Research.

Herrera, C., Grossman, J. B., Kauh, T. J., & McMaken, J. (2011). Mentoring in schools: An impact study of Big Brothers Big Sisters school-based mentoring. *Child Development, 82*(1), 346-361.

Holter, A. C., Magnuson, C., Knutson, C., Knutson Enright, J. A., & Enright, R. D. (2008). The forgiving child: The impact of forgiveness education on excessive anger for elementary-aged children in Milwaukee's central city. *Journal of Research in Education, 18*, 82-93.

Influs, M., Pratt, M., Masalha, S., Zagoory-Sharon, O., & Feldman, R. (2018). A social neuroscience approach to conflict resolution: Dialogue intervention to Israeli and Palestinian youth impacts oxytocin and empathy. *Social Neuroscience*, 1-12. doi:10.1080/17470919.2018.1479983

Jaycox, L. H., McCaffrey, D., Eiseman, B., Aronoff, J., Shelley, G. A., Collins, R. L., & Marshall, G. N. (2006). Impact of a School-Based Dating Violence Prevention Program among Latino Teens: Randomized Controlled Effectiveness Trial. *Journal of Adolescent Health, 39*(5), 694-704. doi:10.1016/j.jadohealth.2006.05.002

Jent, J. F., & Niec, L. N. (2009). Cognitive behavioral principles within group mentoring: A randomized pilot study. *Child & family behavior therapy, 31*(3), 203-219.

Jiménez-Barbero, J. A., Ruiz-Hernández, J. A., Llor-Esteban, B., Llor-Zaragoza, L., & Pérez García, M. (2013). Efficacy of a brief intervention on attitudes to reduce school violence: A randomized clinical trial. *Children and Youth Services Review, 35*(9), 1313-1318. doi:10.1016/j.childyouth.2013.05.010

Joppa, M. C., Rizzo, C. J., Nieves, A. V., & Brown, L. K. (2016). Pilot investigation of the Katie Brown educational program: A school-community partnership. *Journal of School Health, 86*(4), 288-297.

Juvonen, J., & Graham, S. (2004). Research-based interventions on bullying. In C. E. Sanders, G. D. Phye (eds.), *Bullying*. Academic Press.

Kalberg, J. R., Lane, K., & Lambert, W. (2012). The utility of conflict resolution and study skills interventions with middle school students at risk for antisocial behavior: A methodological illustration. *Remedial and Special Education, 33*(1), 23-38.

Kendall, P. C., & Wilcox, L. E. (1980). Cognitive–behavioral treatment for impulsivity: Concrete versus conceptual training in non-self-controlled problem children. *Journal of Consulting and Clinical Psychology, 48*(1), 80-91. doi:10.1037/0022-006X.48.1.80

Khamis, V., Macy, R., & Coignez, V. (2004). *The impact of the classroom/community/camp-based intervention (CBI) program on Palestinian children*. Save the Children, USA.

Khosravi, N., Kolifarhood, G., Shoghli, A., Pashaeypoor, S., & Amlashi, M. (2018). Effectiveness of peer education approach on improving HIV/AIDS related healthy behaviors among immigrant street children: A randomized controlled trial. *Clinical Epidemiology and Global Health, 6*(3), 115-121. doi:10.1016/j.cegh.2017.09.004

Komro, K. A., Livingston, M. D., Wagenaar, A. C., Kominsky, T. K., Pettigrew, D. W., Garrett, B. A., & Cherokee Nation Prevention Trial Team. (2017). Multilevel prevention trial of alcohol use among American Indian and White high school students in the Cherokee Nation. *American journal of public health, 107*(3), 453-459.

Lali, M., Malekpour, M., Molavi, H., Abedi, A., & Asgari, K. (2012). The effects of Parent management training, problem-solving skills training and the eclectic training on conduct disorder in Iranian elementary school students. *International Journal of Psychological Studies, 4*(2), 154.

Lazerson, D. B. (1980). 'I must be good if I can teach!' - peer tutoring with aggressive and withdrawn children. *Journal of Learning Disabilities, 13*(3), 152-157.

Leeman, L. W., Gibbs, J. C., & Fuller, D. (1993). Evaluation of a multicomponent group treatment program for juvenile delinquents. *Aggressive Behavior, 19*(4), 281-292. doi:10.1002/1098-2337(1993)19:4<281::aid-ab2480190404>3.0.co;2-w

Liber, J. M., De Boo, G. M., Huizenga, H., & Prins, P. J. (2013). School-based intervention for childhood disruptive behavior in disadvantaged settings: A randomized controlled trial with and without active teacher support. *Journal of consulting and clinical psychology, 81*(6), 975.

Lochman, J. E. (1985). Effects of different treatment lengths in cognitive behavioral interventions with aggressive boys. *Child Psychiatry and Human Development, 16*(1), 45-56. doi:10.1007/bf00707769

Lok, N., Bademli, K., & Canbaz, M. (2018). The Effects of Anger Management Education on Adolescents' Manner of Displaying Anger and Self-Esteem: A Randomized Controlled Trial. *Archives of Psychiatric Nursing, 32*(1), 75-81. doi:10.1016/j.apnu.2017.10.010

Long, S. J., & Sherer, M. (1985). Social Skills Training With Juvenile Offenders. *Child & Family Behavior Therapy, 6*(4), 1-12. doi:10.1300/J019v06n04_01

Maio, R. F., Shope, J. T., Blow, F. C., Gregor, M. A., Zakrajsek, J. S., Weber, J. E., & Nypaver, M. M. (2005). A Randomized Controlled Trial of an Emergency Department–Based Interactive Computer Program to Prevent Alcohol Misuse Among Injured Adolescents. *Annals of Emergency Medicine, 45*(4), 420-429. doi:https://doi.org/10.1016/j.annemergmed.2004.10.013

Mattos, L. A., Schmidt, A. T., Henderson, C. E., & Hogue, A. (2017). Therapeutic alliance and treatment outcome in the outpatient treatment of urban adolescents: The role of callous-unemotional traits. *Psychotherapy, 54*(2), 136-147. doi:10.1037/pst0000093

McArdle, P., Young, R., Quibell, T., Moseley, D., Johnson, R., & LeCouteur, A. (2011). Early intervention for at risk children: 3-year follow-up. *European Child & Adolescent Psychiatry, 20*(3), 111-120. doi:10.1007/s00787-010-0148-y

McClure, L. F., Chinsky, J. M., & Larcen, S. W. (1978). Enhancing social problem-solving performance in an elementary school setting. *Journal of Educational Psychology, 70*(4), 504-513. doi:10.1037/0022-0663.70.4.504

McCurdy, B., Ciucevich, M. T., & Walker, B. A. (1977). Human-Relations Training with Seventh-Grade Boys Identified as Behavior Problems. *The School Counselor, 24*(4), 248-252.

McMullen, J., O'Callaghan, P., Shannon, C., Black, A., & Eakin, J. (2013). Group trauma-focused cognitive-behavioural therapy with former child soldiers and other war-affected boys in the DR Congo: a randomised controlled trial. *J Child Psychol Psychiatry, 54*(11), 1231-1241. doi:10.1111/jcpp.12094

Mendelson, T., Greenberg, M. T., Dariotis, J. K., Gould, L. F., Rhoades, B. L., & Leaf, P. J. (2010). Feasibility and Preliminary Outcomes of a School-Based Mindfulness Intervention for Urban Youth. *Journal of Abnormal Child Psychology, 38*(7), 985-994. doi:10.1007/s10802-010-9418-x

Millenky, M., Bloom, D., & Dillon, C. (2010). *Making the transition: interim results of the National Guard Youth ChalleNGe evaluation*. In. [New York]: MDRC.

Miller, E., Tancredi, D. J., McCauley, H. L., Decker, M. R., Virata, M. C. D., Anderson, H. A., . . . Silverman, J. G. (2013). One-year follow-up of a coach-delivered dating violence prevention program: A cluster randomized controlled trial. *American Journal of Preventive Medicine, 45*(1), 108-112. doi:10.1016/j.amepre.2013.03.007

Miller, E., Tancredi, D. J., McCauley, H. L., Decker, M. R., Virata, M. C. D., Anderson, H. A., . . . Silverman, J. G. (2012). "Coaching boys into men": A cluster-randomized controlled trial of a dating violence prevention program. *Journal of Adolescent Health, 51*(5), 431-438.

Minnis, A. M., vanDommelen-Gonzalez, E., Luecke, E., Dow, W., Bautista-Arredondo, S., & Padian, N. S. (2014). Yo Puedo-A Conditional Cash Transfer and Life Skills Intervention to Promote Adolescent Sexual Health: Results of a Randomized Feasibility Study in San Francisco. *Journal of Adolescent Health, 55*(1), 85-92. doi:10.1016/j.jadohealth.2013.12.007

Moghadam, G. B., & Najinia, M. A. (2013). *Studying the Effectiveness of training the consciousness skills and emotions control on Self-Esteem and anger control in adolescents with a physical-motional disability in Esfahan.*

Mohamadian, F., Baghri, M., Delpisheh, A., & Veisani, Y. (2017). Interventional study plan to investigate the training effects on physical and psychological outcomes awareness of smoking in teenagers. *Journal of education and health promotion, 6.*

Muck, C., Schiller, E. M., Zimmermann, M., & Kärtner, J. (2018). Preventing Sexual Violence in Adolescence: Comparison of a Scientist-Practitioner Program and a Practitioner Program Using a Cluster-Randomized Design. *Journal of Interpersonal Violence*. doi:10.1177/0886260518755488

Naidoo, S., Satorius, B. K., de Vries, H., & Taylor, M. (2016). Verbal Bullying Changes Among Students Following an Educational Intervention Using the Integrated Model for Behavior Change. *Journal of School Health, 86*(11), 813-822. doi:10.1111/josh.12439

Naranjo, J. M. M. A. (2009). Evaluación de la efectividad de programas destinados a la promoción y mejora de la convivencia en un centro de Educación Secundaria de la provincia de Ciudad Real (Doctoral dissertation, Universidad de Burgos).

Nickel, C., Lahmann, C., Tritt, K., Loew, T. H., Rother, W. K., & Nickel, M. K. (2005). Short communication: Stressed aggressive adolescents benefit from progressive muscle relaxation: A random, prospective, controlled trial. *Stress and Health, 21*(3), 169-175. doi:10.1002/smi.1050

Nieh, H.-P., & Wu, W.-C. (2018). Effects of a Collaborative Board Game on Bullying Intervention: A Group-Randomized Controlled Trial. *Journal of School Health, 88*(10), 725-733. doi:10.1111/josh.12675

Niles, W. J. (1986). Effects of a moral development discussion group on delinquent and predelinquent boys. *Journal of Counseling Psychology, 33*(1), 45-51. doi:10.1037/0022-0167.33.1.45

Norlander, B. (2008). *Targeting dimensions of psychopathy in at -risk youth: Assessment and utility of a focused cognitive behavioral therapy program* (Doctoral dissertation, University of North Texas).

Obsuth, I., Cope, A., Sutherland, A., Pilbeam, L., Murray, A. L., & Eisner, M. (2016). London Education and Inclusion Project (LEIP): Exploring Negative and Null Effects of a Cluster-Randomised School-Intervention to Reduce School Exclusion-Findings from Protocol-Based Subgroup Analyses. *Plos One, 11*(4). doi:10.1371/journal.pone.0152423

O'Callaghan, P., Branham, L., Shannon, C., Betancourt, T. S., Dempster, M., & McMullen, J. (2014). A pilot study of a family focused, psychosocial intervention with war-exposed youth at risk of attack and abduction in north-eastern Democratic Republic of Congo. *Child Abuse and Neglect, 38*(7), 1197-1207. doi:10.1016/j.chiabu.2014.02.004

O'Callaghan, P., McMullen, J., Shannon, C., Rafferty, H., & Black, A. (2013). A randomized controlled trial of trauma-focused cognitive behavioral therapy for sexually exploited, war-affected congolese girls. *Journal of the American Academy of Child and Adolescent Psychiatry, 52*(4), 359-369. doi:10.1016/j.jaac.2013.01.013

Ollendick, T. H., & Hersen, M. (1979). Social skills training for juvenile delinquents. *Behaviour Research and Therapy, 17*(6), 547-554. doi:https://doi.org/10.1016/0005-7967(79)90098-6

O'Neil, S., Coulton, S., Deluca, P., Deverill, M., Drummond, C., Gilvarry, E., . . . Newbury-Birch, D. (2012). Brief intervention to prevent hazardous drinking in young people aged 14-15 in a high school setting (SIPS JR-HIGH): Study protocol for a randomized controlled trial. *Trials, 13*. doi:10.1186/1745-6215-13-166

Ooi, C. S. (2013*). The efficacy and social validity of a group cognitive behavioural therapy for young migrants from war-affected countries* (Doctoral dissertation, Curtin University).

Ooi, C. S., Rooney, R. M., Roberts, C., Kane, R. T., Wright, B., & Chatzisarantis, N. (2016). The efficacy of a group cognitive behavioral therapy for war-affected young migrants living in Australia: A cluster randomized controlled trial. *Frontiers in psychology, 7*, 1641.

Oosterlaan, J., & Sergeant, J. A. (1998). Effects of reward and response cost on response inhibition in AD/HD, disruptive, anxious, and normal children. *Journal of Abnormal Child Psychology, 26*(3), 161-174. doi:10.1023/A:1022650216978

Patton, G., Bond, L., Butler, H., & Glover, S. (2003). Changing schools, changing health? Design and implementation of the Gatehouse Project. *Journal of Adolescent Health, 33*(4), 231-239.

Patton, G. C., Bond, L., Carlin, J. B., Thomas, L., Butler, H., Glover, S., . . . Bowes, G. (2006). Promoting social inclusion in schools: a group-randomized trial of effects on student health risk behavior and well-being. *American Journal of Public Health, 96*(9), 1582.

Pentz, M. W. (1980). Assertion training and trainer effects on unassertive and aggressive adolescents. *Journal of Counseling Psychology, 27*(1), 76-83. doi:10.1037//0022-0167.27.1.76

Perry, C. L., Williams, C. L., Komro, K. A., Veblen-Mortenson, S., Stigler, M. H., Munson, K. A., . . . Forster, J. L. (2002). Project Northland: Long-term outcomes of community action to reduce adolescent alcohol use. *Health Education Research, 17*(1), 117-132.

Perry, C. L., Williams, C. L., Veblen-Mortenson, S., Toomey, T. L., Komro, K. A., Anstine, P. S., . . . Wagenaar, A. C. (1996). Project Northland: outcomes of a communitywide alcohol use prevention program during early adolescence. *American Journal of Public Health, 86*(7), 956-965.

Pertusa, M. G., Rodríguez, J. A. G. D. C., & Sánchez, J. P. E. (2011). Eficacia diferencial de dos programas de prevención escolar sobre el consumo de tabaco, según el tipo de aplicador. *Psicothema, 23*(4), 537-543.

Peskin, M. F., Markham, C. M., Shegog, R., Baumler, E. R., Addy, R. C., & Tortolero, S. R. (2014). Effects of the it's your game . . . keep it real program on dating violence in ethnic-minority middle school youths: A group randomized trial. *American Journal of Public Health, 104*(8), 1471-1477. doi:10.2105/AJPH.2014.301902

Pierre, T. L. S., Osgood, D. W., Mincemoyer, C. C., Kaltreider, D. L., & Kauh, T. J. (2005). Results of an independent evaluation of Project ALERT delivered in schools by cooperative extension. *Prevention Science, 6*(4), 305.

Reddy, S. D., Negi, L. T., Dodson-Lavelle, B., Ozawa-de Silva, B., Pace, T. W. W., Cole, S. P., . . . Craighead, L. W. (2013). Cognitive-Based Compassion Training: A Promising Prevention Strategy for At-Risk Adolescents. *Journal of Child and Family Studies, 22*(2), 219-230. doi:10.1007/s10826-012-9571-7

Rhodes, J. E., Reddy, R., & Grossman, J. B. (2005). The Protective Influence of Mentoring on Adolescents' Substance Use: Direct and Indirect Pathways. *Applied Developmental Science, 9*(1), 31-47. doi:10.1207/s1532480xads0901_4

Rickson, D. J., & Watkins, W. G. (2003). Music Therapy to Promote Prosocial Behaviors in Aggressive Adolescent Boys - A Pilot Study. *Journal of Music Therapy, 40*(4), 283-301.

Rivers, S. E., Brackett, M. A., Reyes, M. R., Elbertson, N. A., & Salovey, P. (2013). Improving the social and emotional climate of classrooms: A clustered randomized controlled trial testing the RULER approach. *Prevention Science, 14*(1), 77-87.

Rodrguez-Planas, N. (2012). Longer-Term Impacts of Mentoring, Educational Services, and Learning Incentives: Evidence from a Randomized Trial in the United States. *American Economic Journal: Applied Economics, 4*(4), 121-139. doi:10.1257/app.4.4.121

Rohde, P., Jorgensen, J. S., Seeley, J. R., & Mace, D. E. (2004). Pilot Evaluation of the Coping Course: A Cognitive-Behavioral Intervention to Enhance Coping Skills in Incarcerated Youth. *Journal of the American Academy of Child & Adolescent Psychiatry, 43*(6), 669-676. doi:10.1097/01.chi.0000121068.29744.a5

Rohrbach, L. A., Dent, C. W., Skara, S., Sun, P., & Sussman, S. (2007). Fidelity of implementation in Project Towards No Drug Abuse (TND): a comparison of classroom teachers and program specialists. *Prevention Science, 8*(2), 125.

Rohrbach, L. A., Gunning, M., Sun, P., & Sussman, S. (2010). The project towards no drug abuse (TND) dissemination trial: implementation fidelity and immediate outcomes. *Prevention Science, 11*(1), 77-88.

Rousseau, C., Benoit, M., Gauthier, M. F., Lacroix, L., Alain, N., Viger Rojas, M., . . . Bourassa, D. (2007). Classroom drama therapy program for immigrant and refugee adolescents: A pilot study. *Clinical Child Psychology and Psychiatry, 12*(3), 451-465. doi:10.1177/1359104507078477

Ruiz-Aranda, D., Castillo, R., Salguero, J. M., Cabello, R., Fernández-Berrocal, P., & Balluerka, N. (2012). Short-and midterm effects of emotional intelligence training on adolescent mental health. *Journal of Adolescent Health, 51*(5), 462-467.

Ruiz-Aranda, D., Salguero, J. M., Cabello, R., Palomera, R., & Berrocal, P. F. (2012). Can an emotional intelligence program improve adolescents' psychosocial adjustment? results from the INTEMO project. *Social Behavior and Personality: an international journal, 40*(8), 1373-1379.

Salmivalli, C., Kaernae, A., & Poskiparta, E. (2011). Counteracting bullying in Finland: The KiVa program and its effects on different forms of being bullied. *International Journal of Behavioral Development, 35*(5), 405-411. doi:10.1177/0165025411407457

Sánchez-Jiménez, V., Muñoz-Fernández, N., & Ortega-Rivera, J. (2018). Efficacy evaluation of "Dat-e Adolescence": A dating violence prevention program in Spain. *Plos One, 13*(10). doi:10.1371/journal.pone.0205802

Sanson-Fisher, R., & Redman, S. (1988). *Randomised Clinical Trial of Brief Behaviourally-oriented Interventions for Pre-delinquents* (10/85). Retrieved from https://pdfs.semanticscholar.org/78a2/5bf986188ee2843a457e638237f219360efb.pdf

Sarason, I. G., & Ganzer, V. J. (1973). Modeling and group discussion in the rehabilitation of juvenile delinquents. *Journal of Counseling Psychology, 20*(5), 442-449. doi:10.1037/h0035389

Sarason, I. G., & Sarason, B. R. (1981). Teaching cognitive and social skills to high school students. *Journal of Consulting and Clinical Psychology, 49*(6), 908-918. doi:10.1037//0022-006X.49.6.908

Scheckner, S. B., & Rollin, S. A. (2003). An Elementary School Violence Prevention Program. *Journal of School Violence, 2*(4), 3-42. doi:10.1300/J202v02n04_02

Schirm, A., Rodriguez-Planas, N., Maxfield, M., & Tuttle, C. (2003). *The Quantum Opportunity Program Demonstration: Short-Term Impacts.* Washington, DC: Mathematica Policy Research, Inc.

Schirm, A., Stuart, E., & McKie, A. (2006). *The Quantum Opportunity Program Demonstration: Final Impacts.* Mathematica Policy Research, Inc.

Seroczynski, A., Evans, W. N., Jobst, A. D., Horvath, L., & Carozza, G. (2016). Reading for Life and Adolescent Re-Arrest: Evaluating a Unique Juvenile Diversion Program. *Journal of Policy Analysis and Management, 35*(3), 662-682.

Shaw, T., Cross, D., & Zubrick, S. R. (2015). Testing for Response Shift Bias in Evaluations of School Antibullying Programs. *Evaluation Review, 39*(6), 527-554. doi:10.1177/0193841X16629863

Shechtman, Z. (1997). Enhancing social relationships and adjusting behavior in the Israeli classroom. *The Journal of Educational Research, 91*(2), 99-107.

Shechtman, Z. (2006). The contribution of bibliotherapy to the counseling of aggressive boys. *Psychotherapy Research, 16*(5), 645-651. doi:10.1080/10503300600591312

Shek, D. T., & Ma, C. M. (2012). Impact of Project P.A.T.H.S. on adolescent developmental outcomes in Hong Kong: findings based on seven waves of data. *Int J Adolesc Med Health, 24*(3), 231-244. doi:10.1515/ijamh.2012.034

Shek, D. T. L., & Yu, L. (2011). Prevention of adolescent problem behavior: Longitudinal impact of the Project P.A.T.H.S. in Hong Kong. *TheScientificWorldJournal, 11*, 546-567. doi:10.1100/tsw.2011.33

Shin, S. K. (2009). Effects of a Solution-Focused Program on the Reduction of Aggressiveness and the Improvement of Social Readjustment for Korean Youth

Probationers. *Journal of Social Service Research, 35*(3), 274-284. doi:10.1080/01488370902901079

Shivrattan, J. (1988). Social Interactional Training And Incarcerated Juvenile Delinquents. *Canadian Journal of Criminology, 30*(2), 145-163.

Shoshani, A., Steinmetz, S., & Kanat-Maymon, Y. (2016). Effects of the Maytiv positive psychology school program on early adolescents' well-being, engagement, and achievement. *Journal of School Psychology, 57*, 73-92. doi:10.1016/j.jsp.2016.05.003

Sieving, R. E., McRee, A. L., Secor-Turner, M., Garwick, A. W., Bearinger, L. H., Beckman, K. J., ... & Resnick, M. D. (2014). Prime Time: Long-Term Sexual Health Outcomes Of a Clinic-Linked Intervention. *Perspectives on sexual and reproductive health, 46*(2), 91-100.

Sieving, R. E., McRee, A.-L., McMorris, B. J., Beckman, K. J., Pettingell, S. L., Bearinger, L. H., . . . Secor-Turner, M. (2013). Prime Time Sexual Health Outcomes at 24 Months for a Clinic-Linked Intervention to Prevent Pregnancy Risk Behaviors. *JAMA Pediatrics, 167*(4), 333-340. doi:10.1001/jamapediatrics.2013.1089

Simonsen, B., Myers, D., & Briere III, D. E. (2011). Comparing a behavioral check-in/check-out (CICO) intervention to standard practice in an urban middle school setting using an experimental group design. *Journal of Positive Behavior Interventions, 13*(1), 31-48.

Simons-Morton, B., Haynie, D., Saylor, K., Crump, A. D., & Chen, R. (2005). The effects of the going places program on early adolescent substance use and antisocial behavior. *Prevention Science, 6*(3), 187.

Simons-Morton, B., Haynie, D., Saylor, K., Crump, A. D., & Chen, R. (2005). Impact analysis and mediation of outcomes: The going places program. *Health Education and Behavior, 32*(2), 227-241. doi:10.1177/1090198104272002

Slone, M., & Shoshani, A. (2008). Efficacy of a school-based primary prevention program for coping with exposure to political violence. *International Journal of Behavioral Development, 32*(4), 348-358. doi:10.1177/0165025408090976

Slone, M., Shoshani, A., & Lobel, T. (2013). Helping youth immediately following war exposure: A randomized controlled trial of a school-based intervention program. *J Prim Prev, 34*(5), 293-307.

Snyder, F., Flay, B., Vuchinich, S., Acock, A., Washburn, I., Beets, M., & Li, K. K. (2009). Impact of a social-emotional and character development program on school-level indicators of academic achievement, absenteeism, and disciplinary outcomes: A matched-pair, cluster-randomized, controlled trial. *Journal of Research on Educational Effectiveness, 3*(1), 26-55.

Snyder, F., Vuchinich, S., Acock, A., Washburn, I., Beets, M., & Li, K. K. (2010). Impact of the Positive Action program on school-level indicators of academic achievement, absenteeism, and disciplinary outcomes: A matched-pair, cluster randomized, controlled trial. *Journal of research on educational effectiveness, 3*(1), 26-55.

Snyder, J. J., & White, M. J. (1979). The use of cognitive self-instruction in the treatment of behaviorally disturbed adolescents. *Behavior Therapy, 10*(2), 227-235. doi:10.1016/S0005-7894(79)80040-4

Snyder, K. V., Kymissis, P., & Kessler, K. (1999). Anger management for adolescents: Efficacy of brief group therapy. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(11), 1409-1416.

Southam-Gerow, M. A., Daleiden, E. L., Chorpita, B. F., Bae, C., Mitchell, C., Faye, M., & Alba, M. (2014). MAPping Los Angeles County: Taking an Evidence-Informed Model of Mental Health Care to Scale. *Journal of Clinical Child and Adolescent Psychology, 43*(2), 190-200. doi:10.1080/15374416.2013.833098

Spence, S. H., & Marzillier, J. S. (1981). Social skills training with adolescent male offenders—II. Short-term, long-term and generalized effects. *Behaviour Research and Therapy, 19*(4), 349-368. doi:https://doi.org/10.1016/0005-7967(81)90056-5

Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2003). Preventing adolescent depression: an evaluation of the problem solving for life program. *Journal of Consulting and Clinical Psychology, 71*(1), 3.

Splett, J. D. (2012). *GIRLSS: a study of the effectiveness of a multi-modal intervention to reduce relational aggression* (Doctoral dissertation, University of Missouri--Columbia).

Stark, L., Seff, I., Asghar, K., Roth, D., Bakamore, T., MacRae, M., . . . Falb, K. L. (2018). Building caregivers' emotional, parental and social support skills to prevent violence against adolescent girls: findings from a cluster randomised controlled trial in Democratic Republic of Congo. *Bmj Global Health, 3*(5), e000824-e000824. doi:10.1136/bmjgh-2018-000824

Sumnall, H., Agus, A., Cole, J. C., Doherty, P., Foxcroft, D., Harvey, S., ... & Percy, A. (2017). Steps Towards Alcohol Misuse Prevention Programme (STAMPP): a school- and community-based cluster randomised controlled trial. *Public Health Research, 5*(2).

Teglasi, H., & Rothman, L. (2001). Stories a classroom-based program to reduce aggressive behavior. *Journal of school psychology, 39*(1), 71-94.

Thomaes, S., Bushman, B. J., Orobio De Castro, B., Cohen, G. L., & Denissen, J. J. A. (2009). Reducing narcissistic aggression by buttressing self-esteem: An experimental field study. *Psychological Science, 20*(12), 1536-1542. doi:10.1111/j.1467-9280.2009.02478.x

Tol, W. A., Komproe, I. H., Jordans, M. J., Vallipuram, A., Sipsma, H., Sivayokan, S., . . . De Jong, J. T. (2012). Outcomes and moderators of a preventive school-based mental health intervention for children affected by war in Sri Lanka: a cluster randomized trial. *World Psychiatry, 11*(2), 114-122.

Uhlig, S., Jansen, E., & Scherder, E. (2018). "Being a bully isn't very cool...": Rap & Sing Music Therapy for enhanced emotional self-regulation in an adolescent school setting - a randomized controlled trial. *Psychology of Music, 46*(4), 568-587. doi:10.1177/0305735617719154

Van Rosmalen-Nooijens, K. A., Prins, J. B., Vergeer, M., Wong, S. H. L. F., & Lagro-Janssen, A. L. (2013). "Young people, adult worries": RCT of an internet-based self-support method "feel the ViBe" for children, adolescents and young adults exposed to family violence, a study protocol. *BMC Public Health, 13*(1). doi:10.1186/1471-2458-13-226

Weiss, B., Catron, T., & Harris, V. (2000). A 2-year follow-up of the effectiveness of traditional child psychotherapy. *Journal of Consulting and Clinical Psychology, 68*(6), 1094-1101. doi:10.1037/0022-006X.68.6.1094

Williford, A., Elledge, L. C., Boulton, A. J., DePaolis, K. J., Little, T. D., & Salmivalli, C. (2013). Effects of the KiVa Antibullying Program on Cyberbullying and Cybervictimization Frequency Among Finnish Youth. *Journal of Clinical Child and Adolescent Psychology, 42*(6), 820-833. doi:10.1080/15374416.2013.787623

Yahav, R., & Cohen, M. (2008). Evaluation of a cognitive-behavioral intervention for adolescents. *International Journal of Stress Management, 15*(2), 173.

Yeager, D. S., Trzesniewski, K. H., & Dweck, C. S. (2013). An Implicit Theories of Personality Intervention Reduces Adolescent Aggression in Response to Victimization and Exclusion. *Child Development, 84*(3), 970-988. doi:10.1111/cdev.12003

Reason of exclusion: mean age at baseline is out of range or the range of ages (if mean not given) is out of range

Aber, J. L., Brown, J. L., Chaudry, N., Jones, S. M., & Samples, F. (1996). The evaluation of the resolving conflict creatively program: An overview. *American Journal of Preventive Medicine, 12*(5), 82-90.

Aber, J. L., Brown, J. L., & Jones, S. M. (2003). Developmental trajectories toward violence in middle childhood: Course, demographic differences, and response to school-based intervention. *Developmental Psychology, 39*(2), 324.

Alemán, X., Duryea, S., Guerra, N. G., McEwan, P. J., Muñoz, R., Stampini, M., & Williamson, A. A. (2017). The Effects of Musical Training on Child Development: a Randomized Trial of El Sistema in Venezuela. *Prevention Science, 18*(7), 865-878. doi:10.1007/s11121-016-0727-3

Algan, Y., Beasley, E., Vitaro, F., & Tremablay, R. E. (2014). The impact of non-cognitive skills training on academic and non-academic trajectories: From childhood to early adulthood. *Manuscript. Sciences Po, Paris.*

August, G. J., Egan, E. A., Realmuto, G. M., & Hektner, J. M. (2003). Four years of the early risers early-age-targeted preventive intervention: Effects on aggressive children's peer relations. *Behavior Therapy, 34*(4), 453-470. doi:10.1016/S0005-7894(03)80030-8

Banyard, V., Hamby, S., & Grych, J. (2016). Using values narratives to promote youth well-being in schools: An exploratory quantitative evaluation of the Laws of Life Essay. *School Social Work Journal*, *40*(2), 1-16.

Barnes, T. N. (2013). *An examination of the influence of student characteristics on the effectiveness of the Tools for Getting Along curriculum* (Doctoral dissertation, University of Florida).

Beets, M. W., Flay, B. R., Vuchinich, S., Snyder, F. J., Acock, A., Li, K.-K., . . . Durlak, J. (2009). Use of a Social and Character Development Program to Prevent Substance Use, Violent Behaviors, and Sexual Activity Among Elementary-School Students in Hawaii. *American Journal of Public Health, 99*(8), 1438-1445. doi:10.2105/ajph.2008.142919

Bernstein, J., Heeren, T., Edward, E., Dorfman, D., Bliss, C., Winter, M., & Bernstein, E. (2010). A Brief Motivational Interview in a Pediatric Emergency Department, Plus 10-day Telephone Follow-up, Increases Attempts to Quit Drinking Among Youth and Young Adults Who Screen Positive for Problematic Drinking. *Academic Emergency Medicine, 17*(8), 890-902. doi:10.1111/j.1553-2712.2010.00818.x

Bierman, K. L., Coie, J., Dodge, K., Greenberg, M., Lochman, J., McMohan, R., . . . Conduct Problems Prevention Res, G. (2013). School Outcomes of Aggressive-Disruptive Children: Prediction From Kindergarten Risk Factors and Impact of the Fast Track Prevention Program. *Aggressive Behavior, 39*(2), 114-130. doi:10.1002/ab.21467

Bierman, K. L., Coie, J. D., Dodge, K. A., Foster, E. M., Greenberg, M. T., Lochman, J. E., . . . Conduct Problems Prevention, R. (2007). Fast track randomized controlled

trial to prevent externalizing psychiatric disorders: Findings from grades 3 to 9. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(10), 1250-1262. doi:10.1097/chi.0b013e31813e5d39

Bierman, K. L., & et al. (1987). Improving the Social Behavior and Peer Acceptance of Rejected Boys: Effects of Social Skill Training with Instructions and Prohibitions. *Journal of Consulting and Clinical Psychology, 55*(2), 194-200. doi:10.1037/0022-006X.55.2.194

Blue, S. W., Madsen, C. H., & Heimberg, R. G. (1981). Increasing coping behavior in children with aggressive behavior: Evaluation of the relative efficacy of the components of a treatment package. *Child Behavior Therapy, 3*(1), 51-60. doi:10.1300/J473V03N01_05

Brown, E. C., Low, S., Smith, B. H., & Haggerty, K. P. (2011). Outcomes From a School-Randomized Controlled Trial of Steps to Respect: A Bullying Prevention Program. *School Psychology Review, 40*(3), 423-443.

Burke, J. D., & Loeber, R. (2016). Mechanisms of Behavioral and Affective Treatment Outcomes in a Cognitive Behavioral Intervention for Boys. *Journal of Abnormal Child Psychology, 44*(1), 179-189. doi:10.1007/s10802-015-9975-0

Burt, I., Patel, S., Butler, S., & Gonzalez, T. (2013). Integrating leadership skills into anger management groups to reduce aggressive behaviors: The LIT model. *Journal of Mental Health Counseling, 35*(2), 124-141.

Calero, C., & Rozo, S. *Can employment prevent risk behavior? The role of socio-emotional skills.*

Calero, C., & Rozo, S. V. (2016). The effects of youth training on risk behavior: the role of non-cognitive skills. *IZA Journal of Labor & Development, 5*(1), 12.

Cave, G., Bos, H., Doolittle, F., & Toussaint, C. (1993). *JOBSTART. Final Report on a Program for School Dropouts.* New York, NY: MDRC. Retrieved from: https://eric.ed.gov/?id=ED363774

Chan, A. S., Cheung, M. C., & Sze, S. L. (2008). Effect of mind/body training on children with behavioral and learning problems: a randomized controlled study. Mind-body and relaxation research focus, 8, 165-193.

Chaux, E., Barrera, M., Molano, A., Maria Velasquez, A., Castellanos, M., Paula Chaparro, M., & Bustamante, A. (2017). Classrooms in Peace Within Violent Contexts: Field Evaluation of Aulas en Paz in Colombia. *Prevention Science, 18*(7), 828-838. doi:10.1007/s11121-017-0754-8

Chen, C., Li, C., Wang, H., Ou, J. J., Zhou, J. S., & Wang, X. P. (2014). Cognitive behavioral therapy to reduce overt aggression behavior in Chinese young male violent offenders. *Aggressive Behavior, 40*(4), 329-336. doi:10.1002/ab.21521

Coci, Y. (2011). *'Me and My Mates': Development and Evaluation of an Emotional and Social Competence Programme for Pre-Primary Children* (Doctoral dissertation, Murdoch University).

Coker, A. L., Bush, H. M., Cook-Craig, P. G., DeGue, S. A., Clear, E. R., Brancato, C. J., . . . Recktenwald, E. A. (2017). RCT Testing Bystander Effectiveness to Reduce Violence. *American Journal of Preventive Medicine, 52*(5), 566-578. doi:10.1016/j.amepre.2017.01.020

Cole, R. L., Treadwell, S., Dosani, S., & Frederickson, N. (2013). Evaluation of a short-term, cognitive-behavioral intervention for primary age children with anger-related difficulties. *School Psychology International, 34*(1), 82-100. doi:10.1177/0143034312451062

Cooper, C., Eslinger, D. M., & Stolley, P. D. (2006). Hospital-based violence intervention programs work. *J Trauma, 61*(3), 534-537; discussion 537-540. doi:10.1097/01.ta.0000236576.81860.8c

Cross, D., Monks, H., Hall, M., Shaw, T., Pintabona, Y., Erceg, E., ... & Lester, L. (2011). Three-year results of the Friendly Schools whole-of-school intervention on children's bullying behaviour. *British Educational Research Journal, 37*(1), 105-129.

Daunic, A. P., Smith, S. W., Brank, E. M., & Penfield, R. D. (2006). Classroom-based cognitive-behavioral intervention to prevent aggression: Efficacy and social validity. *Journal of School Psychology, 44*(2), 123-139. doi:10.1016/j.jsp.2006.01.005

Daunic, A. P., Smith, S. W., Garvan, C. W., Barber, B. R., Becker, M. K., Peters, C. D., . . . Naranjo, A. H. (2012). Reducing developmental risk for emotional/behavioral problems: A randomized controlled trial examining the Tools for Getting Along curriculum. *Journal of School Psychology, 50*(2), 149-166. doi:10.1016/j.jsp.2011.09.003

Day, D. M., & Hartley, L. (1993). *Evaluating a school-based program for aggressive children: comparing outcomes*. Paper presented at the 101st Annual Meeting of the American Psychological Association, Toronto, Ontario.

DEFFENBACHER, J. L., McNAMARA, K., STARK, R. S., & SABADELL, P. M. (1990). A Comparison of Cognitive-Behavioral and Process-Oriented Group Counseling for

General Anger Reduction. *Journal of Counseling & Development, 69*(2), 167-172. doi:doi:10.1002/j.1556-6676.1990.tb01480.x

Deffenbacher, J. L., Story, D. A., Stark, R. S., Hogg, J. A., & Brandon, A. D. (1987). Cognitive-Relaxation and Social Skills Interventions in the Treatment of General Anger. *Journal of Counseling Psychology, 34*(2), 171-176. doi:10.1037/0022-0167.34.2.171

DeRosier, M. E., & Mercer, S. H. (2007). Improving student social behavior: The effectiveness of a storytelling-based character education program. *Journal of Character Education, 5*(2), 131.

Dodge, K. A., & McCourt, S. N. (2010). Translating models of antisocial behavioral development into efficacious intervention policy to prevent adolescent violence. *Developmental Psychobiology, 52*(3), 277-285. doi:10.1002/dev.20440

Fearnow-Kenney, M. D., Wyrick, D. L., Jackson-Newsom, J., Wyrick, C. H., & Hansen, W. B. (2003). Initial indicators of effectiveness for a high school drug prevention program. *American Journal of Health Education, 34*(2), 66-71.

Fekkes, M., Pijpers, F. I. M., & Verloove-Vanhorick, S. P. (2006). Effects of antibullying school program on bullying and health complaints. *Archives of Pediatrics and Adolescent Medicine, 160*(6), 638-644. doi:10.1001/archpedi.160.6.638

Feshbach, N. D. (1979). Empathy training: a field study in affective education. In S. Feshbach & A. Franzek (Eds.), *Aggression and behavior change. Biological and social processes*. New york: Praeger.

Fisher, K. J., Severson, H. H., Christiansen, S., & Williams, C. (2001). Using interactive technology to aid smokeless tobacco cessation: a pilot study. *American Journal of Health Education, 32*(6), 332-342.

Flannery, D. J., Vazsonyi, A. T., Liau, A. K., Guo, S., Powell, K. E., Atha, H., . . . Embry, D. (2003). Initial Behavior Outcomes for the PeaceBuilders Universal School-Based Violence Prevention Program. *Developmental Psychology, 39*(2), 292-308. doi:10.1037//0012-1649.39.2.292

Flay, B. R., & Allred, C. G. (2010). The positive action program: Improving academics, behavior, and character by teaching comprehensive skills for successful learning and living. In *International research handbook on values education and student wellbeing* (pp. 471-501): Springer.

Fonagy, P., Twemlow, S. W., Vernberg, E. M., Nelson, J. M., Dill, E. J., Little, T. D., & Sargent, J. A. (2009). A cluster randomized controlled trial of child-focused psychiatric consultation and a school systems-focused intervention to reduce aggression. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 50*(5), 607-616. doi:10.1111/j.1469-7610.2008.02025.x

Forman, S. G. (1980). A comparison of cognitive training and response cost procedures in modifying aggressive behavior of elementary school children. *Behavior Therapy, 11*(4), 594-600. doi:10.1016/S0005-7894(80)80075-X

Fraser, M. W., Day, S. H., Galinsky, M. J., Hodges, V. G., & Smokowski, P. R. (2004). Conduct problems and peer rejection in childhood: A randomized trial of the Making Choices and Strong Families programs. *Research on Social Work Practice, 14*(5), 313-324.

Frey, K. S., Hirschstein, M. K., Edstrom, L. V., & Snell, J. L. (2009). Observed Reductions in School Bullying, Nonbullying Aggression, and Destructive Bystander Behavior: A Longitudinal Evaluation. *Journal of Educational Psychology, 101*(2), 466-481. doi:10.1037/a0013839

Frey, K. S., Hirschstein, M. K., Snell, J. L., Van Schoiack Edstrom, L., MacKenzie, E. P., & Broderick, C. J. (2005). Reducing playground bullying and supporting beliefs: An experimental trial of the steps to respect program. *Developmental Psychology, 41*(3), 479-490. doi:10.1037/0012-1649.41.3.479

Frey, K. S., Nolen, S. B., Van Schoiack Edstrom, L., & Hirschstein, M. K. (2005). Effects of a school-based social–emotional competence program: Linking children's goals, attributions, and behavior. *Journal of Applied Developmental Psychology, 26*(2), 171-200. doi:https://doi.org/10.1016/j.appdev.2004.12.002

Fung, A. L., & Tsang, S. K. (2007). Anger coping method and skill training for Chinese children with physically aggressive behaviors. *Early Child Development and Care, 177*(3), 259-273.

Fung, L. C. (2004). *Anger coping training (ACT) program with physically aggressive children: a treatment outcome study* (Doctoral dissertation, University of Hong Kong).

Garrison, S., & Stolberg, A. (1983). Modification of anger in children by affective imagery training. *An official publication of the International Society for Research in Child and Adolescent Psychopathology, 11*(1), 115-129. doi:10.1007/BF00912182

Graham, S., Taylor, A., & Hudley, C. (2015). A motivational intervention for African American boys labeled as aggressive. *Urban Education, 50*(2), 194-224.

Graves, S. L., Herndon-Sobalvarro, A., Nichols, K., Aston, C., Ryan, A., Blefari, A., . . . Prier, D. (2017). Examining the Effectiveness of a Culturally Adapted Social-Emotional Intervention for African American Males in an Urban Setting. *School Psychology Quarterly*. doi:10.1037/spq0000145

Greenberg, M. T., Kusché, C. A., & Riggs, N. (2004). The PATHS curriculum: Theory and research on neurocognitive development and school success. *Building academic success on social and emotional learning: What does the research say,* 170-188.

Grossman, D. C., Neckerman, H. J., Koepsell, T. D., & et al. (1997). Effectiveness of a violence prevention curriculum among children in elementary school: A randomized controlled trial. *JAMA, 277*(20), 1605-1611. doi:10.1001/jama.1997.03540440039030

Guerra, N., Henry, D., Huesmann, L. R., & Tolan, P. (2007). Changing the way children" think" about aggression: Social-cognitive effects of a preventive intervention. *Journal of Consulting and Clinical Psychology, 75*(1), 160-167.

Harris, J., Wilkinson, S. C., Trovato, J., & Pryor, C. W. (1992). Teacher-completed child behavior checklist ratings as a function of classroom-based interventions: A pilot study. *Psychology in the Schools, 29*(1), 42-52.

Hemphill, S. A., & Littlefield, L. (2006). Child and Family Predictors of Therapy Outcome for Children with Behavioral and Emotional Problems. *Child Psychiatry and Human Development, 36*(3), 329-349. doi:10.1007/s10578-005-0006-1

Hennessey, B. A. (2007). Promoting social competence in school-aged children: The effects of the open circle program. *Journal of School Psychology, 45*(3), 349-360. doi:10.1016/j.jsp.2006.11.007

Hudley, C. (1995, March). *Reducing Peer Directed Aggression in the Elementary Grades: The Effects of an Attribution Retraining Program* [Paper presentation]. 61st Biennial Meeting of th eSociety for Research in Child Development, Indianapolis, IN.

Hudley, C., Britsch, B., Wakefield, W. D., Smith, T., Demorat, M., & Cho, S.-J. (1998). An Attribution Retraining Program to Reduce Aggression in Elementary School Students. *Psychology in the Schools, 35*(3), 271-282.

Hudley, C. A. (1992). An attribution retraining program to reduce peer-directed aggression among African-American male elementary school students.

Huesmann, L. R., Eron, L. D., Klein, R., Brice, P., & Fischer, P. (1983). Mitigating the imitation of aggressive behaviors by changing children's attitudes about media violence. *Journal of Personality and Social Psychology, 44*(5), 899.

Huesmann, L. R., Maxwell, C. D., Eron, L., Dahlberg, L. L., Guerra, N. G., Tolan, P. H., . . . Henry, D. (1996). Evaluating a cognitive/ecological program for the prevention of aggression among urban children. *American Journal of Preventive Medicine, 12*(5 SUPPL.), 120-128.

Hughes, J. N., & Cavell, T. A. (1999). School-Based Interventions for Aggressive Children. In *Handbook of psychotherapies with children and families* (pp. 419-446). Springer, Boston, MA.

Ison, M. S. (2001). Training in Social Skills: An Alternative Technique for Handling Disruptive Child Behavior. *Psychological Reports, 88*(3), 903-911. doi:10.2466/pr0.2001.88.3.903

Ison, M. S., & Rodriguez, C. I. (1997). Desarrollo de habilidades sociales en el tratamiento de conductas problema infantiles. *Revista Mexicana de Psicologia, 14*(2), 129-137.

Ivaschenko, O., Naidoo, D., Newhouse, D., & Sultan, S. (2017). Can public works programs reduce youth crime? Evidence from Papua New Guinea's Urban Youth Employment Project. *IZA Journal of Development and Migration, 7*(1), 9.

Izard, C. E., King, K., Trentacosta, C. J., Morgan, J., Laurenceau, J. P., Krauthamer-Ewing, E., & Finlon, K. (2008). Accelerating the development of emotion competence in Head Start children: Effects on adaptive and maladaptive behavior. In *Development and Psychopathology* (Vol. 20, pp. 369-397).

James, C., Asscher, J. J., Stams, G. J. J. M., & van der Laan, P. H. (2016). The effectiveness of aftercare for juvenile and young adult offenders. *International Journal of Offender Therapy and Comparative Criminology, 60*(10), 1159-1184.

Jenson, J. M., Brisson, D., Bender, K. A., & Williford, A. P. (2013). Effects of the Youth Matters Prevention Program on Patterns of Bullying and Victimization in Elementary and Middle School. *Social Work Research, 37*(4), 361-372. doi:10.1093/swr/svt030

Jenson, J. M., Dieterich, W. A., Brisson, D., Bender, K. A., & Powell, A. (2010). Preventing Childhood Bullying: Findings and Lessons from the Denver Public Schools Trial. *Research on Social Work Practice, 20*(5), 509-517. doi:10.1177/1049731509359186

Jones, M., & Offord, D. (1989). Reduction of antisocial behavior in poor children by nonschool skill-development. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 30*(Sep 89), 737-750.

Jones, S. M., Brown, J. L., & Lawrence Aber, J. (2011). Two-Year Impacts of a Universal School-Based Social-Emotional and Literacy Intervention: An Experiment in Translational Developmental Research. *Child Development, 82*(2), 533-554. doi:10.1111/j.1467-8624.2010.01560.x

Jones, S. M., Brown, J. L., & Lawrence Aber, J. (2011). Two-year impacts of a universal school-based social-emotional and literacy intervention: An experiment in translational developmental research. *Child Development, 82*(2), 533-554.

Kärnä, A., Voeten, M., Little, T. D., Poskiparta, E., Kaljonen, A., & Salmivalli, C. (2011). A Large-Scale Evaluation of the KiVa Antibullying Program: Grades 4-6. *Child Development, 82*(1), 311-330. doi:10.1111/j.1467-8624.2010.01557.x

Katz, L. F., Kling, J. R., & Liebman, J. B. (2001). Moving to opportunity in Boston: Early results of a randomized mobility experiment. *The Quarterly Journal of Economics, 116*(2), 607-654.

Kelly, P. J., Lesser, J., Cheng, A.-L., Oscos-Sanchez, M., Martinez, E., Pineda, D., & Mancha, J. (2010). A Prospective Randomized Controlled Trial of an Interpersonal Violence Prevention Program With a Mexican American Community. *Family & Community Health, 33*(3), 207-215. doi:10.1097/FCH.0b013e3181e4bc34

Kendall, P. C., & Zupan, B. A. (1981). Individual versus group application of cognitive-behavioral self-control procedures with children. *Behavior Therapy, 12*(3), 344-359. doi:10.1016/S0005-7894(81)80123-2

Kettlewell, P., & Kausch, D. (1983). The generalization of the effects of a cognitive-behavioral treatment program for aggressive children. *An official publication of the International Society for Research in Child and Adolescent Psychopathology, 11*(1), 101-114. doi:10.1007/BF00912181

Kim, H.-S., & Kim, H.-S. (2018). Effect of a musical instrument performance program on emotional intelligence, anxiety, and aggression in Korean elementary school children. *Psychology of Music, 46*(3), 440-453. doi:10.1177/0305735617729028

Kling, J. R., Liebman, J. B., & Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica, 75*(1), 83-119.

Kolko, D. J., Campo, J. V., Kelleher, K., & Cheng, Y. (2010). Improving Access to Care and Clinical Outcome for Pediatric Behavioral Problems: A Randomized Trial of a Nurse-Administered Intervention in Primary Care. *Journal of Developmental and Behavioral Pediatrics, 31*(5), 393-404. doi:10.1097/DBP.0b013e3181dff307

Kourmousi, N., Markogiannakis, G., Tzavara, C., Kounenou, K., Mandrikas, A., Christopoulou, E., & Koutras, V. (2018). Students' Psychosocial Empowerment With The 'Steps For Life'Personal and Social Skills Greek Elementary Programme. *International Electronic Journal of Elementary Education, 10*(5), 535-549.

Leff, S., Gullan, R., Paskewich, B., & ... (2009). An initial evaluation of a culturally adapted social problem-solving and relational aggression prevention program for urban African-American relationally aggressive …. *Journal of Prevention ….*

Leff, S., Waasdorp, T., & ... (2016). The Broader Impact of Friend to Friend (F2F) Effects on Teacher–Student Relationships, Prosocial Behaviors, and Relationally and Physically Aggressive Behaviors. *Behavior Modification*.

Leff, S. S., Gullan, R. L., Paskewich, B. S., Abdul-Kabir, S., Jawad, A. F., Grossman, M., . . . Power, T. J. (2009). An Initial evaluation of a culturally adapted social problem-solving and relational aggression prevention program for urban African-American relationally aggressive girls. *Journal of Prevention and Intervention in the Community, 37*(4), 260-274. doi:10.1080/10852350903196274

Leff, S. S., Waasdorp, T. E., Paskewich, B., Gullan, R. L., Jawad, A. F., MacEvoy, J. P., . . . Power, T. J. (2010). The Preventing Relational Aggression in Schools Everyday

Program: A Preliminary Evaluation of Acceptability and Impact. *School Psychology Review, 39*(4), 569-587.

Lefler, E. K., Hartung, C. M., Scambler, D. J., Page, M. C., Sullivan, M. A., Armendariz, M. L., . . . Warner, C. M. (2009). Effects of a Social Skills Intervention Administered in Mixed Diagnostic Groups for Children with Peer Relationship Problems. *NHSA Dialog, 12*(1), 18-32. doi:10.1080/15240750802590750

Lewis, K. M. (2012). *Evaluation of a Social-Emotional and Character Development Program: Methods and Outcomes.* (3531984 Ph.D.), Oregon State University, Ann Arbor. Retrieved from https://search.proquest.com/docview/1220905905?accountid=13828

http://find.shef.ac.uk/openurl/44SFD/44SFD_services_page?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:ProQuest+Dissertations+%26+Theses+A%26I&atitle=&title=Evaluation+of+a+Social-Emotional+and+Character+Development+Program%3A+Methods+and+Outcomes&issn=&date=2012-01-01&volume=&issue=&spage=&au=Lewis%2C+Kendra+M.&isbn=9781267744258&jtitle=&btitle=&rft_id=info:eric/&rft_id=info:doi/ ProQuest Dissertations & Theses A&I database.

Little, T., Poskiparta, E., Kaljonen, A., & Salmivalli, C. *A Large-Scale Evaluation of the KiVa Anti-Bullying Program Antti Kärnä University of Turku, Finland Marinus Voeten Radboud University Nijmegen, the ….*

Lochman, J. E., Burch, P. R., Curry, J. F., & Lampron, L. B. (1984). Treatment and Generalization Effects of Cognitive-Behavioral and Goal-Setting Interventions with

Aggressive Boys. *Journal of Consulting and Clinical Psychology, 52*(5), 915-916. doi:10.1037/0022-006X.52.5.915

Lochman, J. E., Coie, J. D., Underwood, M. K., & Terry, R. (1993). Effectiveness of a Social Relations Intervention Program for Aggressive and Nonaggressive, Rejected Children. *Journal of Consulting and Clinical Psychology, 61*(6), 1053-1058. doi:10.1037/0022-006X.61.6.1053

Lochman, J. E., & Wells, K. C. (2003). Effectiveness of the Coping Power Program and of classroom intervention with aggressive children: Outcomes at a 1-year follow-up. *Behavior Therapy, 34*(4), 493-515.

Low, S., Ryzin, M., Brown, E., Smith, B., & Haggerty, K. (2014). Engagement Matters: Lessons from Assessing Classroom Implementation of Steps to Respect: A Bullying Prevention Program Over a One-year Period. *Prevention Science, 15*(2), 165-176. doi:10.1007/s11121-012-0359-1

Middleton, M. B. (1994). *The effects of social skills instruction and parent participation on aggressive behaviors, antisocial behaviors, and prosocial skills exhibited by primary-age students* (Doctoral dissertation, The Ohio State University).

Midthassel, U. V., Bru, E., & Idsoe, T. (2008). Is the sustainability of reduction in bullying related to follow-up procedures?. *Educational Psychology, 28*(1), 83-95.

Mucherah, W., Lapsley, D. K., Miels, J., & Horton, M. (2004). An intervention to improve sociomoral climate in elementary school classrooms: An Evaluation of Don't Laugh at Me. *Journal of Character Education, 2*(1), 45.

Nocentini, A., Menesini, E., & Pluess, M. (2018). The Personality trait of environmental sensitivity predicts children's positive response to school-based antibullying intervention. *Clinical Psychological Science, 6*(6), 848-859.

Omizo, M. M., Hershberger, J. M., & Omizo, S. A. (1988). teaching children to cope with anger. *Elementary School Guidance & Counseling, 22*(3), 241-245.

O'Neill, J. M., Clark, J. K., & Jones, J. A. (2011). Promoting Mental Health and Preventing Substance Abuse and Violence in Elementary Students: A Randomized Control Study of the Michigan Model for Health. *Journal of School Health, 81*(6), 320-330. doi:10.1111/j.1746-1561.2011.00597.x

Owens, J. S., Murphy, C. E., Richerson, L., Girio, E. L., & Himawan, L. K. (2008). Science to practice in underserved communities: The effectiveness of school mental health programming. *Journal of Clinical Child and Adolescent Psychology, 37*(2), 434-447. doi:10.1080/15374410801955912

Pepler, D., King, G., Craig, W., Byrd, B., & Bream, L. (1995). The development and evaluation of a multisystem social skills group training program for aggressive children. *Child and Youth Care Forum, 24*(5), 297-313. doi:10.1007/BF02128600

Pepler, D., Walsh, M., Yuile, A., Levene, K., Jiang, D., Vaughan, A., & Webber, J. (2010). Bridging the gender gap: Interventions with aggressive girls and their parents. *Prevention Science, 11*(3), 229-238. doi:10.1007/s11121-009-0167-4

Pepler, D. J., Craig, W. M., Ziegler, S., & Charach, A. (2009). An evaluation of an anti-bullying intervention in Toronto schools. *Canadian Journal of Community Mental Health, 13*(2), 95-110.

Ramos, C., Nieto, A.M. & Chaux, E. (2007). Aulas en Paz: Resultados preliminares de un programa multi-componente. *Revista Interamericana de Educación para la Democracia, 1*, 36-56.

Ramos, C., Nieto, A. M., & Chaux, E. (2007). Classrooms in peace: Preliminary results of a multi-component program. *Inter-American Journal of Education for Democracy, 1*(1), 35-58.

Rhine, T. J. (2000). *The effects of a play therapy intervention conducted by trained high school students on the behavior of maladjusted young children: Implications for school counselors* (Doctoral dissertation, University of North Texas).

Schlichter, K. J., & Horan, J. J. (1981). Effects of stress inoculation on the anger and aggression management skills of institutionalized juvenile delinquents. *Cognitive Therapy and Research, 5*(4), 359-365. doi:10.1007/BF01173687

Scholte, W. F., Verduin, F., Kamperman, A. M., Rutayisire, T., Zwinderman, A. H., & Stronks, K. (2011). The effect on mental health of a large scale psychosocial intervention for survivors of mass violence: A quasi-experimental study in Rwanda. *Plos One, 6*(8). doi:10.1371/journal.pone.0021819

Seay, H. A., Fee, V. E., Holloway, K. S., & Giesen, J. M. (2003). A Multicomponent Treatment Package to Increase Anger Control in Teacher-Referred Boys. *Child & Family Behavior Therapy, 25*(1), 1-18. doi:10.1300/J019v25n01_01

Shechtman, Z. (1999). Bibliotherapy for treatment of child aggression: The program and a single-group study. *Child Psychiatry and Human Development, 30*, 39-53.

Smith, S., Daunic, A., Barber, B., Aydin, B., Loan, C., & Taylor, G. (2014). Preventing Risk for Significant Behavior Problems Through a Cognitive-Behavioral Intervention:

Effects of the Tools for Getting Along Curriculum at One-Year Follow-Up. *J Prim Prev, 35*(5), 371-387. doi:10.1007/s10935-014-0357-0

Smokowski, P. R., Fraser, M. W., Day, S. H., Galinsky, M. J., & Bacallao, M. L. (2004). School-Based Skills Training to Prevent Aggressive Behavior and Peer Rejection in Childhood: Evaluating the Making Choices Program. *Journal of Primary Prevention, 25*(2), 233-251. doi:10.1023/b:jopp.0000042392.57611.05

Snyder, F. J. (2011). *Enhancing Social-Emotional and Character Development for Youths' Success: A Theoretical Orientation and an Evaluation Using a Cluster-Randomized Design.* (3464417 Ph.D.), Oregon State University, Ann Arbor. Retrieved from https://search.proquest.com/docview/881639488?accountid=13828

Snyder, F. J., Acock, A. C., Vuchinich, S., Beets, M. W., Washburn, I. J., & Flay, B. R. (2013). Preventing negative behaviors among elementary-school students through enhancing students' social-emotional and character development. *American Journal of Health Promotion, 28*(1), 50-58. doi:10.4278/ajhp.120419-QUAN-207.2

Spiropoulos, G. V., Salisbury, E. J., & Van Voorhis, P. (2014). Moderators of correctional treatment success: An exploratory study of racial differences. *International Journal of Offender Therapy and Comparative Criminology, 58*(7), 835-860. doi:10.1177/0306624X13492999

Stallard, P., Skryabina, E., Taylor, G., Anderson, R., Ukoumunne, O. C., Daniels, H., ... & Simpson, N. (2015). A cluster randomised controlled trial comparing the effectiveness and cost-effectiveness of a school-based cognitive-behavioural therapy programme (FRIENDS) in the reduction of anxiety and improvement in mood in children aged 9/10 years. *Public Health Research, 3*(14), 1-114.

Stoolmiller, M., Eddy, J. M., & Reid, J. B. (2000). Detecting and describing preventive intervention effects in a universal school-based randomized trial targeting delinquent and violent behavior. *Journal of Consulting and Clinical Psychology, 68*(2), 296-306. doi:10.1037//0022-006X.68.2.296

Sukhodolsky, D. G., Solomon, R. M., & Perine, J. (2000). Cognitive-Behavioral, Anger-Control Intervention for Elementary School Children: A Treatment-Outcome Study. *Journal of Child and Adolescent Group Therapy, 10*(3), 159-170. doi:10.1023/a:1009488701736

Szapocznik, J., Rio, A., Murray, E., Cohen, R., Scopetta, M., Rivas-Vazquez, A., . . . Kurtines, W. (1989). Structural Family Versus Psychodynamic Child Therapy for Problematic Hispanic Boys. *Journal of Consulting and Clinical Psychology, 57*(5), 571-578. doi:10.1037/0022-006X.57.5.571

Taussig, H. N., Culhane, S. E., Garrido, E., Knudtson, M. D., & Petrenko, C. L. M. (2013). Does Severity of Physical Neglect Moderate the Impact of an Efficacious Preventive Intervention for Maltreated Children in Foster Care? *Child Maltreatment, 18*(1), 56-64. doi:10.1177/1077559512461397

Teglasi, H., & Rothman, L. (2001). A classroom-based program to reduce aggressive behavior. *Journal of School Psychology, 39*(1), 71-94. doi:10.1016/S0022-4405(00)00060-1

Tol, W. A., Komproe, I. H., Jordans, M. J. D., Gross, A. L., Susanty, D., MacY, R. D., & De Jong, J. T. V. M. (2010). Mediators and moderators of a psychosocial intervention for children affected by political violence. *Journal of Consulting and Clinical Psychology, 78*(6), 818-828. doi:10.1037/a0021348

Tsiantis, A. C. J., Beratis, I. N., Syngelaki, E. M., Stefanakou, A., Asimopoulos, C., Sideridis, G. D., & Tsiantis, J. (2013). The effects of a clinical prevention program on bullying, victimization, and attitudes toward school of elementary school students. *Behavioral Disorders, 38*(4), 243-257.

Twemlow, S. W., Fonagy, P., & Sacco, F. C. (2005). A developmental approach to mentalizing communities: II. The Peaceful Schools experiment. *Bulletin of the Menninger Clinic, 69*(4), 282-304. doi:10.1521/bumc.2005.69.4.282

Twenge, J. M., Liqing, Z., Catanese, K. R., Dolan-Pascoe, B., Lyche, L. F., & Baumeister, R. F. (2007). Replenishing connectedness: Reminders of social activity reduce aggression after social exclusion. *British Journal of Social Psychology, 46*(1), 205-224. doi:10.1348/014466605X90793

Vazsonyi, A. T., Belliston, L. M., & Flannery, D. J. (2004). Evaluation of a school-based, universal violence prevention program: Low-, medium-, and high-risk children. *Youth Violence and Juvenile Justice, 2*(2), 185-206.

Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (2012). The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: A randomized controlled effectiveness trial. *Archives of Pediatrics and Adolescent Medicine, 166*(2), 149-156. doi:10.1001/archpediatrics.2011.755

Ward, C. L., Mertens, J. R., Bresick, G. F., Little, F., & Weisner, C. M. (2015). Screening and brief intervention for substance misuse: Does it reduce aggression and HIV-related risk behaviours? *Alcohol and Alcoholism, 50*(3), 302-309. doi:10.1093/alcalc/agv007

Watt, B. D., & Howells, K. (1999). Skills training for aggression control: Evaluation of an anger management programme for violent offenders. *Legal and Criminological Psychology, 4*(2), 285-300.

Wilson, B. J., & Ray, D. (2018). Child-Centered Play Therapy: Aggression, Empathy, and Self-Regulation. *Journal of Counseling and Development, 96*(4), 399-409. doi:10.1002/jcad.12222

Wu, Y. C. (2018). *BREAKWAY: Examining the Educational Potential of Using a Narrative-based Digital Game for Bullying Prevention* (Doctoral dissertation, State University of New York at Buffalo).

Zuilkowski, S. S., Collet, K., Jambai, M., Akinsulure-Smith, A. M., & Betancourt, T. S. (2016). Youth and Resilience in Postconflict Settings: An Intervention for War-Affected Youth in Sierra Leone. *Human Development, 59*(2-3), 64-80. doi:10.1159/000448227

Reason of exclusion: the study is not an evaluation of an intervention

American Academy of Pediatrics. (2008). Injury Prevention Education While Waiting in the ED. *AAP Grand Rounds, 20*(6), 69-70.

American Academy of Pediatrics. (2009). School-based Program to Prevent Dating Violence. *AAP Grand Rounds, 22*(6), 69-69.

Asad, N., Karmaliani, R., McFarlane, J., Bhamani, S. S., Somani, Y., Chirwa, E., & Jewkes, R. (2017). The intersection of adolescent depression and peer violence: baseline results from a randomized controlled trial of 1752 youth in Pakistan. *Child and Adolescent Mental Health, 22*(4), 232-241. doi:10.1111/camh.12249

Battleson, B.L. and Nesset, V. (2012). An investigation of the role of an on-site library in the provision of adjunct bibliotherapeutic treatment for emotionally disturbed youth. *Qualitative and Quantitative Methods in Libraries, 3,* 287-293

Berends, L., & Lubman, D. I. (2011). Brief intervention in an emergency department reduces violence in the short term but not alcohol misuse in at-risk adolescents. *Evidence Based Mental Health, 14*(1), 20-20.

Brooker, M. (2009). *Youth mentoring and adult-youth relationships: The importance of context* (Doctoral dissertation, Murdoch University).

Buckley, L. D., & Sheehan, M. C. (2010). An adolescent injury intervention: selecting targeted behaviours with implications for program design and evaluation. *Australian health review, 34*(4), 487-492.

Cáceres, J. R. C., & de Toledo, B. J. (2006). Los programas contra el acoso escolar y su efectividad durante el tiempo de implantación. *Evidencias en pediatría, 2*(3), 15.

Cantor, J., & Wilson, B. J. (2003). Media and violence: Intervention strategies for reducing aggression. *Media Psychology, 5*(4), 363-403.

Casañas, R., Arfuch, V. M., Castellví, P., Gil, J. J., Torres, M., Pujol, A., . . . Lalucat-Jo, L. (2018). "EspaiJove.net"- A school-based intervention programme to promote mental health and eradicate stigma in the adolescent population: study protocol for a cluster randomised controlled trial. *BMC Public Health, 18*(1). doi:10.1186/s12889-018-5855-1

Clarkson, S., Axford, N., Berry, V., Edwards, R. T., Bjornstad, G., Wrigley, Z., . . . Matthews, J. (2015). Effectiveness and micro-costing of the KiVa school-based

bullying prevention programme in Wales: study protocol for a pragmatic definitive parallel group cluster randomised controlled trial. *BMC Public Health, 16*(1), 104.

Cross, D., & Barnes, A. (2015). Protecting and promoting young people's social and emotional health in online and offline contexts. In *Handbook of Children and Youth Studies* (pp. 115-126).

Cross, D., Marg, H., Waters, S., & Hamilton, G. (2005). *A randomised control trial to reduce bullying and other aggressive behaviours in secondary schools*. Perth, Australia: Edith Cowan University.

Dishion, T., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist*.

Eargle, A., Guerra, N., & Tolan, P. (1994). Small-group treatment for children living in high violence neighborhoods. *Journal of Child and Adolescent Group Therapy, 4*, 229-243.

Edberg, M., Cleary, S. D., Collins, E., Klevens, J., Leiva, R., Bazurto, M., . . . Calderon, M. (2010). The SAFER Latinos project: Addressing a community ecology underlying Latino youth violence. *J Prim Prev, 31*(4), 247-257.

Fagen, M. C., & Flay, B. R. (2009). Sustaining a School-Based Prevention Program: Results From the Aban Aya Sustainability Project. *Health Education & Behavior, 36*(1), 9-23. doi:10.1177/109019816291376

Gaete, J., Valenzuela, D., Rojas-Barahona, C., Valenzuela, E., Araya, R., & Salmivalli, C. (2017). The KiVa antibullying program in primary schools in Chile, with and without the digital game component: study protocol for a randomized controlled trial. *Trials, 18*. doi:10.1186/s13063-017-1810-1

Goldstein, A. P. (2004). Evaluations of effectiveness. *New perspectives on aggression replacement training,* 230-244.

Goldstein, A. P., & Glick, B. (1994). Aggression Replacement Training: Curriculum and Evaluation. *Simulation & Gaming, 25*(1), 9-26. doi:10.1177/1046878194251003

Goldstein, A. P., Glick, B., & Gibbs, J. C. (1998). *Aggression replacement training: A comprehensive intervention for aggressive youth*, Rev. Research Press.

Goldstein, A. P., Glick, B., Reiner, S., Zimmerman, D., Coultry, T. M., & Gold, D. (1986). Aggression Replacement Training: A comprehensive intervention for the acting-out delinquent. *Journal of Correctional Education*, 120-126.

Goldstein, A. P., Sherman, M., Gershaw, N. J., Sprafkin, R. P., & Glick, B. (1978). Training aggressive adolescents in prosocial behavior. *Journal of Youth and Adolescence, 7*(1), 73-92. doi:10.1007/BF01538688

Green, A. E., Willging, C. E., Zamarin, K., Dehaiman, L. M., & Ruiloba, P. (2018). Cultivating healing by implementing restorative practices for youth: Protocol for a cluster randomized trial. *International Journal of Educational Research*. doi:10.1016/j.ijer.2018.11.005

Greim, J. L. (1992). *Adult/Youth Relationships Pilot Project. Initial Implementation Report.* Retirement Research Foundation.

Grossman, J. B., & Garry, E. M. (1997). *Mentoring: A proven delinquency prevention strategy*: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Handwerk, M. L., Field, C. E., & Friman, P. C. (2000). The iatrogenic effects of group intervention for antisocial youth: Premature extrapolations?. *Journal of Behavioral education, 10*(4), 223-238.

Henry, D. B., Farrell, A. D., & Project, T. M. V. P. (2004). The study designed by a committee: Design of the Multisite Violence Prevention Project. *American journal of preventive medicine, 26*(1), 12-19.

Henry, D., Guerra, N., Huesmann, R., Tolan, P., Van Acker, R., & Eron, L. (2000). Normative Influences on Aggression in Urban Elementary School Classrooms. *American Journal of Community Psychology, 28*(1), 59-81.

Jalón, M. J. D. A. (2005). La violencia entre iguales en la adolescencia y su prevención desde la escuela. *Psicothema, 17*(4), 549-558.

Joy, S. D. S. (2011). Interventions to reduce teen violence and alcohol use. *AJN The American Journal of Nursing, 111*(2), 67.

Kahn, L., Garcia, S., & Romens, K. *Big Brothers Big Sisters of America*.

Kazdin, A. E. (2018). Implementation and evaluation of treatments for children and adolescents with conduct problems: Findings, challenges, and future directions. *Psychotherapy Research, 28*(1), 3-17. doi:10.1080/10503307.2016.1208374

Kersten, L., Pratzlich, M., Mannstadt, S., Ackermann, K., Kohls, G., Oldenhof, H., . . . Stadler, C. (2016). START NOW - a comprehensive skills training programme for female adolescents with oppositional defiant and conduct disorders: study protocol for a cluster-randomised controlled trial. *Trials, 17*(1), 568. doi:10.1186/s13063-016-1705-6

Kuosmanen, T., Fleming, T. M., & Barry, M. M. (2018). The implementation of SPARX-R computerized mental health program in alternative education: Exploring the factors contributing to engagement and dropout. *Children and Youth Services Review, 84*, 176-184.

Lee, M., & Kang, H. (2014). Multicultural Mentoring Program Using Logic Model as an Integrative Framework. A*dvanced Science and Technology Letters, 71,* 154-158. doi:10.14257/astl.2014.71.36

Lochman, J. E., Curry, J. F., Dane, H., & Ellis, M. (2001). The Anger Coping Program: An Empirically-Supported Treatment for Aggressive Children. *Residential Treatment for Children & Youth, 18*(3), 63-73. doi:10.1300/J007v18n03_06

Macy, R. D., Macy, D. J., Gross, S. I., & Brighton, P. (2003). Healing in familiar settings: Support for children and youth in the classroom and community. *New Directions in Youth Development, 98*, 51-79.

McFarlane, J., Karmaliani, R., Khuwaja, H. M. A., Gulzar, S., Somani, R., Ali, T. S., . . . Jewkes, R. (2017). Preventing Peer Violence Against Children: Methods and Baseline Data of a Cluster Randomized Controlled Trial in Pakistan. *Global Health-Science and Practice, 5*(1), 115-137. doi:10.9745/ghsp-d-16-00215

McGinnis, E. (2003). Aggression Replacement Training: A Viable Alternative. *Reclaiming Children and Youth, 12*(3), 161-166.

Meyer, A. L., Farrell, A., Northup, W., Kung, E., & Plybon, L. (2000). Promoting non-violence in early adolescence: Responding in peaceful and positive ways. Springer Science & Business Media.

Mink, M. (2014). *Bullying prevention: Combining whole-school approaches and positive school climate* (Master's Thesis, State University of New York).

Morrow, K. V., & Styles, M. B. (1995). *Building relationships with youth in program settings: A study of Big Brothers/Big Sisters*: Public/Private Ventures Philadelphia, PA.

Newton, N. C., Stapinski, L., Slade, T., Champion, K. E., Barrett, E. L., Chapman, C., . . . Teesson, M. (2018). Pathways to prevention: Protocol for the CAP (Climate and Preventure) study to evaluate the long-term effectiveness of school-based universal, selective and combined alcohol misuse prevention into early adulthood. *BMC Public Health, 18*(1). doi:10.1186/s12889-018-5554-y

Norton, E. C., Bieler, G. S., Ennett, S. T., & Zarkin, G. A. (1996). Analysis of prevention program effectiveness with clustered data using generalized estimating equations. *Journal of Consulting and Clinical Psychology, 64*(5), 919.

O'Neil, S., Coulton, S., Deluca, P., Deverill, M., Drummond, C., Gilvarry, E., ... & McArdle, P. (2012). Brief intervention to prevent hazardous drinking in young people aged 14–15 in a high school setting (SIPS JR-HIGH): study protocol for a randomized controlled trial. *Trials, 13*(1), 166.

Ozaki, R. (2017). *Active Bystander Behaviors Among High School Students: The Role of Co-occurrence of Violence Victimization and Perpetration in Personal Violence Prevention* (Doctoral dissertation, University of Kentucky).

Perry, C. L., Stigler, M. H., Arora, M., & Reddy, K. S. (2008). Prevention in translation: tobacco use prevention in India. *Health Promotion Practice, 9*(4), 378-386.

Rimbey, A. (2009). A dramatherapy intervention to bullying in elementary schools: bully? a role to be or not to be (Doctoral dissertation, Concordia University).

Salmivalli, C., & Poskiparta, E. (2012). Making bullying prevention a priority in Finnish schools: the KiVa antibullying program. *New directions for youth development, 2012*(133), 41-53. doi:10.1002/yd.20006

Salmivalli, C., Poskiparta, E., Ahtola, A., & Haataja, A. (2013). The implementation and effectiveness of the KiVa antibullying program in Finland. *European Psychologist, 18*(2), 79-88. doi:10.1027/1016-9040/a000140

Satalino, R. (2015). *Reforming Juvenile Corrections Through Martial Arts* (Selected Honor Theses, Southeastern University – Lakeland).

Shaw, G. (2007). Restorative practices in Australian schools: Changing relationships, changing culture. *Conflict Resolution Quarterly, 25*(1), 127-135.

Singh, N. N., Deitz, D. E., Epstein, M. H., & Singh, J. (1991). Social behavior of students who are seriously emotionally disturbed: A quantitative analysis of intervention studies. *Behavior Modification, 15*(1), 74-94.

Snider, C., Jiang, D., Logsetty, S., Strome, T., & Klassen, T. (2015). Wraparound care for youth injured by violence: Study protocol for a pilot randomised control trial. *BMJ Open, 5*(5). doi:10.1136/bmjopen-2015-008088

Splett, J. W., George, M. W., Zaheer, I., Weist, M. D., Evans, S. W., & Kern, L. (2018). Symptom Profiles and Mental Health Services Received Among Referred Adolescents. *School Mental Health*, 1-15. doi:10.1007/s12310-017-9244-1

Sukhodolsky, D. G., Vander Wyk, B. C., Eilbott, J. A., McCauley, S. A., Ibrahim, K., Crowley, M. J., & Pelphrey, K. A. (2016). Neural Mechanisms of Cognitive-

Behavioral Therapy for Aggression in Children and Adolescents: Design of a Randomized Controlled Trial Within the National Institute for Mental Health Research Domain Criteria Construct of Frustrative Non-Reward. *Journal of Child and Adolescent Psychopharmacology, 26*(1), 38-48. doi:10.1089/cap.2015.0164

Twemlow, S. W., Fonagy, P., Sacco, F. C., & Jellinek, M. S. (2001). An innovative psychodynamically influenced approach to reduce school violence. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(3), 377-379.

Winters, D. E., & Beerbower, E. (2017). Mindfulness and meditation as an adjunctive treatment for adolescents involved in the juvenile justice system: Is repairing the brain and nervous system possible?. *Social work in health care, 56*(7), 615-635.

Yang, A. (2015). *Bully-victims: Prevalence, psychosocial adjustment, and responsiveness to intervention* (Doctoral dissertation, University of turku).

Yubero, S., Larrañaga, E., Sánchez-García, S., & Cañamares, C. (2016). Reading and texts: Cyberbullying prevention from child and youth literature. In *Cyberbullying Across the Globe* (pp. 259-277). Springer, Cham.

Reason of exclusion: intervention is not mainly addressed to the adolescents

Ana Carina, S.-P., & Lucia Cavalcanti de Albuquerque, W. (2016). Evaluation of a Brazilian School Violence Prevention Program (Violência Nota Zero). *Pensamiento Psicológico, 14*(1), 63-76. doi:10.11144/Javerianacali.PPSI14-1.ebsv

Asscher, J. J., Deković, M., Manders, W. A., van der Laan, P. H., & Prins, P. J. M. (2013). A randomized controlled trial of the effectiveness of multisystemic therapy in the

Netherlands: Post-treatment changes and moderator effects. *Journal of Experimental Criminology, 9*(2), 169-187. doi:10.1007/s11292-012-9165-9

Asscher, J. J., Deković, M., van den Akker, A. L., Manders, W. A., Prins, P. J. M., van der Laan, P. H., & Prinzie, P. (2016). Do personality traits affect responsiveness of juvenile delinquents to treatment? *Journal of Research in Personality, 63*, 44-50. doi:10.1016/j.jrp.2016.05.004

Asscher, J. J., Deković, M., Van den Akker, A. L., Prins, P. J., & Van der Laan, P. H. (2018). Do extremely violent juveniles respond differently to treatment?. *International journal of offender therapy and comparative criminology, 62*(4), 958-977.

Augimeri, L. K., Farrington, D. P., Koegl, C. J., & Day, D. M. (2007). The SNAP™ under 12 outreach project: Effects of a community based program for children with conduct problems. *Journal of Child and Family Studies, 16*(6), 799-807. doi:10.1007/s10826-006-9126-x

Balaji, M., Andrews, T., Andrew, G., & Patel, V. (2011). The acceptability, feasibility, and effectiveness of a population-based intervention to promote youth health: An exploratory study in Goa, India. *Journal of Adolescent Health, 48*(5), 453-460. doi:10.1016/j.jadohealth.2010.07.029

Bell, C. D. (2008). *Evaluation of an abbreviated bully prevention program for reducing aggression in a middle school* (Doctoral dissertation, uga).

Bergström, M., & Höjman, L. (2016). Is multidimensional treatment foster care (MTFC) more effective than treatment as usual in a three-year follow-up? Results from MTFC in a Swedish setting. *European Journal of Social Work, 19*(2), 219-235. doi:10.1080/13691457.2015.1030361

Butler, S., Baruch, G., Hickey, N., & Fonagy, P. (2011). A randomized controlled trial of multisystemic therapy and a statutory therapeutic intervention for young offenders. *Journal of the American Academy of Child and Adolescent Psychiatry, 50*(12), 1220-1235. doi:10.1016/j.jaac.2011.09.017

Cheng, T. L., Haynie, D., Brenner, R., Wright, J. L., Chung, S.-e., & Simons-Morton, B. (2008). Effectiveness of a mentor-implemented, violence prevention intervention for assault-injured youths presenting to the emergency department: Results of a randomized trial. *Pediatrics, 122*(5), 938-946.

Cluver, L. D., Meinck, F., Steinert, J. I., Shenderovich, Y., Doubt, J., Romero, R. H., . . . Gardner, F. (2018). Parenting for Lifelong Health: a pragmatic cluster randomised controlled trial of a non-commercialised parenting programme for adolescents and their families in South Africa. *Bmj Global Health, 3*(1). doi:10.1136/bmjgh-2017-000539

Connell, A. M., Dishion, T. J., Yasui, M., & Kavanagh, K. (2007). An Adaptive Approach to Family Intervention: Linking Engagement in Family-Centered Intervention to Reductions in Adolescent Problem Behavior. *Journal of Consulting and Clinical Psychology, 75*(4), 568-579. doi:10.1037/0022-006X.75.4.568

Cross, D., Waters, S., Pearce, N., Shaw, T., Hall, M., Erceg, E., . . . Hamilton, G. (2012). The Friendly Schools Friendly Families programme: Three-year bullying behaviour outcomes in primary school children. *International Journal of Educational Research, 53*(Supplement C), 394-406. doi:https://doi.org/10.1016/j.ijer.2012.05.004

DeGarmo, D. S., Eddy, J. M., Reid, J. B., & Fetrow, R. A. (2009). Evaluating mediators of the impact of the Linking the Interests of Families and Teachers (LIFT) multimodal

preventive intervention on substance use initiation and growth across adolescence. *Prevention Science, 10*(3), 208-220. doi:10.1007/s11121-009-0126-0

Dymnicki, A. B. (2014). Moderating effects of school climate on outcomes for the multisite violence prevention project universal program. *Journal of Research on Adolescence, 24*(2), 383-398. doi:10.1111/jora.12073

Eddy, J. M., Reid, J. B., & Fetrow, R. A. (2000). An Elementary School-Based Prevention Program Targeting Modifiable Antecedents of Youth Delinquency and Violence. *Journal of Emotional and Behavioral Disorders, 8*(3), 165-176. doi:10.1177/106342660000800304

Fergusson, D. M., Boden, J. M., & Horwood, L. J. (2013). Nine-Year Follow-up of a Home-Visitation Program: A Randomized Trial. *Pediatrics, 131*(2), 297-303. doi:10.1542/peds.2012-1612

Gradinger, P., Yanagida, T., Strohmeier, D., & Spiel, C. (2015). Prevention of Cyberbullying and Cyber Victimization: Evaluation of the ViSC Social Competence Program. *Journal of School Violence, 14*(1), 87-110. doi:10.1080/15388220.2014.963231

Gradinger, P., Yanagida, T., Strohmeier, D., & Spiel, C. (2016). Effectiveness and sustainability of the ViSC Social Competence Program to prevent cyberbullying and cyber-victimization: Class and individual level moderators. *Aggressive Behavior, 42*(2), 181-193. doi:10.1002/ab.21631

Haggerty, K. P., Skinner, M. L., MacKenzie, E. P., & Catalano, R. F. (2007). A randomized trial of parents who care: Effects on key outcomes at 24-month follow-up. *Prevention Science, 8*(4), 249-260. doi:10.1007/s11121-007-0077-2

Harrell, A. W., Mercer, S. H., & DeRosier, M. E. (2009). Improving the Social-Behavioral Adjustment of Adolescents: The Effectiveness of a Social Skills Group Intervention. *Journal of Child and Family Studies, 18*(4), 378-387. doi:10.1007/s10826-008-9241-y

Henry, D. (2013). The moderating role of developmental microsystems in selective preventive intervention effects on aggression and victimization of aggressive and socially-influential students. *Prevention science, 14*(4), 390-399.

Henry, D. B. (2012). Mediators of Effects of a Selective Family-Focused Violence Prevention Approach for Middle School Students. *Prevention Science, 13*(1), 1-14. doi:10.1007/s11121-011-0245-2

Hickman, L. J., Setodji, C. M., Jaycox, L. H., Kofner, A., Schultz, D., Barnes-Proby, D., & Harris, R. (2013). Assessing programs designed to improve outcomes for children exposed to violence: Results from nine randomized controlled trials. *Journal of Experimental Criminology, 9*(3), 301-331.

Hunt, C. (2007). The effect of an education program on attitudes and beliefs about bullying and bullying behaviour in junior secondary school students. *Child and Adolescent Mental Health, 12*(1), 21-26. doi:10.1111/j.1475-3588.2006.00417.x

Jansen, D. E. M. C., Vermeulen, K. M., Schuurman-Luinge, A. H., Knorth, E. J., Buskens, E., & Reijneveld, S. A. (2013). Cost-effectiveness of Multisystemic Therapy for adolescents with antisocial behaviour: study protocol of a randomized controlled trial. *BMC Public Health, 13*. doi:10.1186/1471-2458-13-369

Jordans MJD et al. (2013) Implementation of a mental health care package for children in areas of armed conflict: a case study from Burundi, Indonesia, Nepal, Sri Lanka, and Sudan. *PLoS Med 10*(1):e1001371.

Kannappan, R., & Lakshmi Bai, R. (2008). Efficacy of yoga: Cognitive and human relationship training for correcting maladjusted behaviour in deviant school boys. *Journal of the Indian Academy of Applied Psychology, 34*(Special Issue), 60-65.

Kohli, A., Perrin, N. A., Remy, M. M., Alfred, M. B., Arsene, K. B., Nadine, M. B., . . . Glass, N. (2017). Adult and adolescent livestock productive asset transfer programmes to improve mental health, economic stability and family and community relationships in rural South Kivu Province, Democratic Republic of Congo: a protocol of a randomised controlled trial. *BMJ Open, 7*(3). doi:10.1136/bmjopen-2016-013612

Kyriakides, L., Creemers, B. P., Muijs, D., Rekers-Mombarg, L., Papastylianou, D., Van Petegem, P., & Pearson, D. (2014). Using the dynamic model of educational effectiveness to design strategies and actions to face bullying. *School effectiveness and school improvement, 25*(1), 83-104.

Lipman, E. L., Boyle, M. H., Cunningham, C., Kenny, M., Sniderman, C., Duku, E., . . . Waymouth, M. (2006). Testing effectiveness of a community-based aggression management program for children 7 to 11 years old and their families. *Journal of the American Academy of Child and Adolescent Psychiatry, 45*(9), 1085-1093. doi:10.1097/01.chi.0000228132.64579.73

Lochman, J. E., & Wells, K. C. (2002). The coping power program at the middle-school transition: Universal and indicated prevention effects. *Psychology of Addictive Behaviors, 16*(SUPPL. 14), S40-S54.

Lochman, J. E., & Wells, K. C. (2004). The coping power program for preadolescent aggressive boys and their parents: Outcome effects at the 1-year follow-up. *Journal of Consulting and Clinical Psychology, 72*(4), 571-578. doi:10.1037/0022-006X.72.4.571

Masi, G., Milone, A., Paciello, M., Lenzi, F., Muratori, P., Manfredi, A., . . . Muratori, F. (2014). Efficacy of a multimodal treatment for disruptive behavior disorders in children and adolescents: Focus on internalizing problems. *Psychiatry Research, 219*(3), 617-624. doi:10.1016/j.psychres.2014.05.048

Morris, P. A., Aber, J. L., Wolf, S., & Berg, J. (2017). Impacts of Family Rewards on Adolescents' Mental Health and Problem Behavior: Understanding the Full Range of Effects of a Conditional Cash Transfer Program. *Prevention Science, 18*(3), 326-336. doi:10.1007/s11121-017-0748-6

Nickel, M., Luley, J., Krawczyk, J., Nickel, C., Widermann, C., Lahmann, C., . . . Loew, T. (2006). Bullying girls - Changes after brief strategic family therapy: A randomized, prospective, controlled trial with one-year follow-up. *Psychotherapy and Psychosomatics, 75*(1), 47-55. doi:10.1159/000089226

Nickel, M. K., Krawczyk, J., Nickel, C., Forthuber, P., Kettler, C., Leiberich, P., . . . Loew, T. H. (2005). Anger, interpersonal relationships, and health-related quality of life in bullying boys who are treated with outpatient family therapy: A randomized, prospective, controlled trial with 1 year of follow-up. *Pediatrics, 116*(2), e247-e254. doi:10.1542/peds.2004-2534

Nickel, M. K., Nickel, C., Leiberich, P., Tritt, K., Mitterlehner, F. O., Lahmann, C., . . . Loew, T. H. (2005). Aggressive female youth benefit from outpatient family therapy: A randomized, prospective, controlled trial. *Pediatrics International, 47*(2), 167-171. doi:10.1111/j.1442-200x.2005.02048.x

Oesterle, S., Hawkins, J. D., Kuklinski, M. R., Fagan, A. A., Fleming, C., Rhew, I. C., ... & Catalano, R. F. (2015). Effects of Communities That Care on males' and females'

drug use and delinquency 9 years after baseline in a community-randomized trial. *American journal of community psychology, 56*(3-4), 217-228.

Sexton, T., & Turner, C. W. (2010). The Effectiveness of Functional Family Therapy for Youth With Behavioral Problems in a Community Practice Setting. *Journal of Family Psychology, 24*(3), 339-348. doi:10.1037/a0019406

Shechtman, Z., & Birani-Nasaraladin, D. (2006). Treatment of aggression: The contribution of parent involvement. *Int J Group Psychother, 56*, 93-112.

Shechtman, Z., & Abu Yaman, M. (2012). SEL as a component of a literature class to improve relationships, behavior, motivation, and content knowledge. *American Educational Research Journal, 49*(3), 546-567.

Sidora-Arcoleo, K., Anson, E., Lorber, M., Cole, R., Olds, D., & Kitzman, H. (2010). Differential Effects of a Nurse Home-Visiting Intervention on Physically Aggressive Behavior in Children. *Journal of Pediatric Nursing, 25*(1), 35-45. doi:10.1016/j.pedn.2008.07.011

Simon, T. R., Ikeda, R. M., Smith, E. P., Reese, L. E., Rabiner, D. L., Miller, S., . . . Allison, K. W. (2009). The Ecological Effects of Universal and Selective Violence Prevention Programs for Middle School Students: A Randomized Trial. *Journal of Consulting and Clinical Psychology, 77*(3), 526-542. doi:10.1037/a0014395

Simon, T. R., Ikeda, R. M., Smith, E. P., Reese, L. E., Rabiner, D. L., Miller-Johnson, S., . . . Allison, K. W. (2008). The multisite violence prevention project: Impact of a universal school-based violence prevention program on social-cognitive outcomes. *Prevention Science, 9*(4), 231-244. doi:10.1007/s11121-008-0101-1

Shanahan Somerville, C. F. (2015). *Development and evaluation of a sustainable intervention programme* (Doctoral dissertation, University of Birmingham).

Spoth, R. L., Redmond, C., & Shin, C. (2000). Reducing adolescents' aggressive and hostile behaviors: Randomized trial effects of a brief family intervention 4 years past baseline. *Archives of Pediatrics and Adolescent Medicine, 154*(12), 1248-1257.

Stadler, C., Grasmann, D., Fegert, J. M., Holtmann, M., Poustka, F., & Schmeck, K. (2008). Heart rate and treatment effect in children with disruptive behavior disorders. *Child Psychiatry and Human Development, 39*(3), 299-309.

Sundell, K., Lofholm, C. A., Gustle, L. H., Hansson, K., Olsson, T., & Kadesjo, C. (2008). The transportability of multisystemic therapy to Sweden: Short-term results from a randomized trial of conduct-disordered youths. *Journal of Family Psychology, 22*(4), 550-560. doi:10.1037/0012790

Thaker, S., Steckler, A., Sanchez, V., Khatapoush, S., Rose, J., & Hallfors, D. D. (2008). Program characteristics and organizational factors affecting the implementation of a school-based indicated prevention program. *Health Education Research, 23*(2), 238-248. doi:10.1093/her/cym025

Thornback, K., & Muller, R. T. (2015). Relationships among emotion regulation and symptoms during trauma-focused CBT for school-aged children. *Child Abuse and Neglect, 50*, 182-192. doi:10.1016/j.chiabu.2015.09.011

Wiist, W. H., Jackson, R. H., & Jackson, K. W. (1996). Peer and community leader education to prevent youth violence. *American Journal of Preventive Medicine, 12*(5 SUPPL.), 56-64.

Reason of exclusion: full text could not be found or accessed

Aubrey, L. L. (1998). *Motivational interviewing with adolescents presenting for outpatient substance abuse treatment* (Doctoral dissertation, ProQuest Information & Learning).

Beran, T. N., & Tutty, L. (2002). An evaluation of the Dare to Care: Bully proofing your school program. Unpublished. Calgary, Alberta: RESOLVE Alberta.

Berlin, R. J. (1979). *Teaching acting-out adolescents prosocial conflict resolution through structured learning training of empathy*.

Boswell, J. W. (1983). *Effects of a multimodal counseling program and of a cognitive-behavioral counseling program on the anger management skills of pre-adolescent boys within an elementary school setting (aggression).* (8409020 Ph.D.), The Pennsylvania State University, Ann Arbor. Retrieved from https://search.proquest.com/docview/303171488?accountid=13828

Botvin, G. J., & Scheier, L. M. (1997). Preventing drug abuse and violence. *Health Promoting and Health Damaging Behaviors among Minority Adolescents*, 55-86.

Burman, L. B. (2009). *Resolving drama: The effects of a theater-based youth violence prevention program on problem-solving skills* (Doctoral dissertation, Massachusetts School of Professional Psychology).

Burrow-Sanchez, J. J., & Hawken, L. S. (2013). *Helping students overcome substance abuse: Effective practices for prevention and intervention.* Guilford Publications.

Byrne, D. L. (2008). *The effects of participative goal setting on aggression replacement training for middle school students with emotional and behavioral disorders.* University of Denver.

Contreras-Byrd, M. (1981). *A Study of the Effectiveness of a Structured Life Skills Program in Facilitating Appropriate Classroom Behavior.* Rutgers University, New Brunswick, NJ.

Domino, M. B. (2011). *The impact of take the LEAD on school bullying among middle school youth* (Doctoral dissertation, Walden University).

Flay, B., Burns, J., & He, Y. (2000). *The Aban Aya youth project: Preventing violence among inner-city African American youth*. Paper presented at the annual meeting of the Society for Prevention Research, New Orleans.

Fullchange, A. (2017). *Effectiveness of an Empathy Intervention for Youths At-Risk* (Doctoral dissertation, UC Santa Barbara).

Gardner, E. M., & Kohlberg, L. (1983). *Moral education for the emotionally disturbed early adolescent: An application of Kohlbergian techniques and spiritual principles.* Lexington Books.

Geathers, C. B. (2010). *DIVAS Mentoring Program follow-up study.* University of Connecticut.

Goldstein, A. P. (1994). *The Prosocial Gang: Implementing Aggression Replacement Training.* Sage Publications, Inc., 2455 Teller Road, Thousand Oaks, CA 91320.

Gottfredson, D. C. (1990*). Managing Adolescent Behavior: A Multi-Year, Multi-School Experiment.* Report No. 50.

Grey, L. D. (2015). *An analysis of school-based mentoring and its impacton the academic achievement gap between AfricanAmerican and White middle school students* (Doctoral dissertation, Oakland University).

Guerra, N. G., Tolan, P. H., Henry, D., Van Acker, R., Huesmann, L. R., & Eron, L. (1998). *Developmental and contextual influences on the prevention of aggression in urban settings: preliminary outcomes from the Metropolitan Area Child Study*. Paper presented at the 106th Annual Meeting of the American Psychological Association, San Francisco, CA.

Heath, B. L. (1979). *Application of verbal self-instructional procedures to classroom behavior management* (Doctoral dissertation, ProQuest Information & Learning).

Klatt, J. (2008). *Testing a forgiveness intervention to treat aggression among adolescents in a type 1 correctional facility: A pilot study* (Doctoral dissertation, ProQuest Information & Learning).

Lochman, J. E., Dunn, S. E., & Klimes-Dougan, B. (1993). An intervention and consultation model from a social cognitive perspective: A description of the anger coping program. *School psychology review, 22*(3), 458-471.

Lochman, J. E., & Lampron, L. B. (1988). Cognitive-behavioral interventions for aggressive boys: 7-month follow-up effects. *Journal of Child & Adolescent Psychotherapy.*

Morgan, S. P. (1998). *Effects of anger coping training on aggressive boys attending a behavioral day treatment program* (Doctoral dissertation, Hofstra University).

Muscott, H. S. (1988). Prosocial Skills Training for Children with Emotional Disturbances (ED) and Behavioral Disorders (BD): The Journey of 1,000 Miles Begins with the First Few Steps. *Perceptions, 24*(1), n1.

Novaco, R. W. (1975). *Anger control: The development and evaluation of an experimental treatment.* Lexington.

Olweus, D. (2005). *New positive results with the Olweus Bullying Prevention Program in 37 Oslo schools.* Report. Bergen, Norway: Research Center for Health Promotion, University of Bergen.

Pfeiffer, S. I., & Reddy, L. A. (2014). *Innovative mental health interventions for children: Programs that work*. Routledge.

Pietrucha, C. A. (1998). *A social-cognitive intervention program: toward the reduction of children's aggressive behavior through modification of social goals.* University of Maine.

Rajan, S. (2010). *The development, implementation, and evaluation of a national skills-based health education curriculum for adolescent youth* (Doctoral dissertation, Teachers College, Columbia University).

Rendek, T. E. (2007). *The effects of a multimedia-based anger management intervention on the aggressive and prosocial behavior of children with disabilities*. University of Louisville.

Riestenberg, N. (2001). *In-school behavior intervention grants: A three-year evaluation of alternative approaches to suspensions and expulsions.* Roseville, MN: Minnesota Dept. of Children, Families & Learning.

Rodriguez, O. (2012). *Efficacy of school-based mental health program on prosocial behavior and aggression among Mexican American children* (Doctoral dissertation, Walden University).

Sackles, J. A. (1980). *An evaluation of three treatment programs for anger control in young adolescents* (Doctoral dissertation, Hofstra University).

Sadeghi, A., Ahmadi, S., & Abedi, M. (2002). *A study of the effectiveness of group trainings in anger managementin a rational emotional behavioral style.*

Saylor, C. F., Benson, B., & Einhaus, L. (1985). Evaluation of an anger management program for aggressive boys in inpatient treatment. *Journal of Child & Adolescent Psychotherapy, 2*(1), 5-15.

Spatz, C. (1992). The effect of self-statements and structured learning training of empathy upon the aggressive behavior and prosocial conflict resolution of elementary school-aged children.

Udayar, S. (2008). *The Influence of Character Education on Student Behavior and Student Academic Achievement in Texas Character Plus Middle Schools*: ProQuest.

Weinstein, A. (2011). *Modifying children's alcohol expectancies using child-relevant prevention videos*. State University of New York at Binghamton.

Winkel, F., Baldry, A., Stephenson, G., & Clark, N. (1997). An application of the scared s' traight principle in early intervention programming: three studies on activating the other's perspective in pre-adolescents' perceptions of a stepping-stone behavior. Procedures in Criminal Justice: Contemporary Psychological Issues. *Issues in Criminological and Legal Psychology*, 3-14.

Wood, M. O. (1978). *Acquisition and transfer of assertiveness in passive and aggressive adolescents through the use of structured learning therapy* (Doctoral dissertation, ProQuest Information & Learning).

Reason of exclusion: outcome at baseline is not reported

Bonell, C., Mathiot, A., Allen, E., Bevilacqua, L., Christie, D., Elbourne, D., . . . Viner, R. M. (2017). Initiating change locally in bullying and aggression through the school environment (INCLUSIVE) trial: update to cluster randomised controlled trial protocol. *Trials, 18*. doi:10.1186/s13063-017-1984-6

Carney, M. M. (1996). An evaluation of wraparound services with juvenile delinquent youth (Doctoral dissertation, The Ohio State University).

De Vos, E., Stone, D. A., Goetz, M. A., & Dahlberg, L. L. (1996). Evaluation of a hospital-based youth violence intervention. *American Journal of Preventive Medicine, 12*(5 SUPPL.), 101-108.

Esbensen, F.-A., & Osgood, D. W. (1999). Gang Resistance Education and Training (GREAT): Results from the national evaluation. *Journal of Research in Crime and Delinquency, 36*(2), 194-225.

Garaigordobil, M. (2010). Efectos del programa" Dando pasos hacia la paz" sobre factores cognitivos y conductuales de la violencia juvenil. *Psicología Conductual, 18*(2), 277.

Garaigordobil, M., Martínez-Valderrey, V., Maganto, C., Bernarás, E., & Jaureguizar, J. (2016). Efectos de Cyberprogram 2.0 en factores del desarrollo socioemocional/Effects of Cyberprogram 2.0 on Factors of Socio-Emotional Development. *Pensamiento Psicológico, 14*(1), 33-47.

Ludwig, J., & Shah, A. (2014). *Think before you act: A new approach to preventing youth violence and dropout. The Hamilton Project.* Brookings Institute: Washington, DC.

Lumba-Brown, A., Batek, M., Choi, P., Keller, M., & Kennedy, R. (2017). Mentoring Pediatric Victims of Interpersonal Violence Reduces Recidivism. *Journal of Interpersonal Violence*. doi:10.1177/0886260517705662

Millenky, M., Bloom, D., Muller-Ravett, S., & Broadus, J. (2012*). Staying on course: Three-year results of the National Guard Youth ChalleNGe evaluation.* MDRC Paper.

Roberto, A. J., Eden, J., Savage, M. W., Ramos-Salazar, L., & Deiss, D. M. (2014). Outcome Evaluation Results of School-Based Cybersafety Promotion and Cyberbullying Prevention Intervention for Middle School Students. *Health Communication, 29*(10), 1029-1042. doi:10.1080/10410236.2013.831684

Rodriguez-Planas, N. (2010). *Mentoring, Educational Services, and Economic Incentives: Longer-Term Evidence on Risky Behaviors from a Randomized Trial*. IZA Discussion Paper No. 4968. Available at SSRN: https://ssrn.com/abstract=1631103

Scott, K. K., Tepas Iii, J. J., Frykberg, E., Taylor, P. M., & Plotkin, A. J. (2002). Turning point: Rethinking violence - Evaluation of program efficacy in reducing adolescent violent crime recidivism. *Journal of Trauma - Injury, Infection and Critical Care, 53*(1), 21-27.

Sloane, S. (2002). *A study of the effectiveness of Alternatives to Violence workshops in a prison system*: Citeseer.

Reason of exclusion: participants are selected due to a specific diagnosis

Bolton, P., Bass, J., Betancourt, T., Speelman, L., Onyango, G., Clougherty, K. F., . . . Verdeli, H. (2007). Interventions for Depression Symptoms Among Adolescent Survivors of War and Displacement in Northern Uganda: A Randomized Controlled Trial. *JAMA, 298*(5), 519-527. doi:10.1001/jama.298.5.519

Boylan, K., MacPherson, H. A., & Fristad, M. A. (2013). Examination of Disruptive Behavior Outcomes and Moderation in a Randomized Psychotherapy Trial for Mood Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 52*(7), 699-708. doi:10.1016/j.jaac.2013.04.01

Espelage, D. L., Rose, C. A., & Polanin, J. R. (2016). Social-emotional learning program to promote prosocial and academic skills among middle school students with disabilities. *Remedial and Special Education, 37*(6), 323-332.

Espelage, D. L., Rose, C. A., & Polanin, J. R. (2015). Social-Emotional Learning Program to Reduce Bullying, Fighting, and Victimization Among Middle School Students With Disabilities. *Remedial and Special Education, 36*(5), 299-311. doi:10.1177/0741932514564564

Henggeler, S. W., Rowland, M. D., Pickrel, S. G., Miller, S. L., Cunningham, P. B., Santos, A. B., . . . Edwards, J. E. (1997). Investigating family-based alternatives to institution-based mental health services for youth: lessons learned from the pilot study of a randomized field trial. *Journal of Clinical Child Psychology, 26*(3), 226-233.

Hinshaw, S. P., Henker, B., & Whalen, C. K. (1984). Self-control in hyperactive boys in anger-inducing situations: Effects of cognitive-behavioral training and of methylphenidate. *Journal of Abnormal Child Psychology, 12*(1), 55-77. doi:10.1007/BF00913461

Rickson, D. J., & Watkins, W. G. (2003). Music Therapy to Promote Prosocial Behaviors in Aggressive Adolescent Boys - A Pilot Study. *Journal of Music Therapy, 40*(4), 283-301.

Tol, W. A., Komproe, I. H., Jordans, M. J. D., Ndayisaba, A., Ntamutumba, P., Sipsma, H., . . . de Jong, J. T. V. M. (2014). School-based mental health intervention for

children in war-affected Burundi: A cluster randomized trial. *BMC Medicine, 12*(1). doi:10.1186/1741-7015-12-56

Webb, C., Hayes, A. M., Grasso, D., Laurenceau, J.-P., & Deblinger, E. (2014). Trauma-Focused Cognitive Behavioral Therapy for Youth: Effectiveness in a Community Setting. *Psychological Trauma-Theory Research Practice and Policy, 6*(5), 555-562. doi:10.1037/a0037364

Appendix C

Characteristics of included studies

Table B1

Characteristics of included studies

Study	Study design	Participant characteristics	Relevant outcome measure	Interventions	Comparators	Level of intervention	Setting and country	*d*[a]
Abdulmalik, Ani, Ajuwon, and Omigbodun (2016)	CRCT	N = 40 Age (mean) = 12 100% male	a) Outcome: Aggression Measure: Teacher Rating of Students' Aggressive Behaviours Type: teacher report b) Outcome: Aggression Measure: Self-Rated Aggression Scale Type: self-report	Thinking group 6 sessions 2 sessions/week 40 min/session 5 BCTs: 1.2, 4.1, 4.3, 11.2, 15.4	Waiting list	Targeted	2 public primary schools in Nigeria	(a) 1.2 (b) 0.9
Atria and Spiel (2007)	CRCT	N = 112 Age (mean) = 17 51% male	Outcome: Bullying Measure: Olweus' Bully/Victim Questionnaire Type: self-report Follow-up: (a) post-test (b) 4 months	Viennese Social Competence training 7 months 13 lessons 1.5h/lesson 7 BCTs: 1.1, 1.2, 1.3, 1.7, 5.3, 8.1, 8.2	No treatment	Targeted	Vocational school in Austria	(a) 0.40 (b) 0.22
Baldry and Farrington (2004)	CRCT	N = 239 Age (mean) = 13.33 58% male	a) Outcome: Bullying Measure: Olweus Bully/Victim Questionnaire ("I bullied others") Type: self-report Follow-up: 4 months	Bulli & Pupe 3weeks 3h/week 6 BCTs: 4.2, 5.3, 6.3, 8.1, 8.2, 13.2	No treatment	Universal	e) 2 middle schools f) 1 high school in Italy	(a,e) -0.18 (b,e) -0.13 (c,e) -0.06 (d,e) -0.16 (a,f) -0.03 (b,f) 0.07 (c,f) 0.05 (d,f) 0.04

			b) Outcome: Physical Aggression Measure: Olweus Bully/Victim Questionnaire ("I physically hurt") Type: self-report Follow-up: 4 months c) Outcome: Threats Measure: Olweus Bully/Victim Questionnaire ("I threatened") Type: self-report Follow-up: 4 months d) Outcome: Bullying Measure: Olweus Bully/Victim Questionnaire (Direct Bullying) Type: self-report Follow-up: 4 months					
Barekatain, Taghavi, Salehi, and Hasanzadeh (2006)	RCT	N = 36 Age (mean) = 14.17 100% male	Outcome: Aggression Measure: Aggression Questionnaire Type: self-report Follow-up: (a) post-test (b) 2 months	c) Rational Emotive Behavioural therapy 10 weeks 1h/week 2 BCTs: 8.2, 13.2 d) Relaxation Therapy 10 weeks 1h/week 6 BCTs: 2.3, 4.2, 8.1, 8.2, 8.6, 12.5	Waiting list	Targeted	Iran	(a,c) 1.11 (a,d) 1.42 (b,c) 1.33 (b,d) 1.49
Betzalel and Shechtman (2017)	RCT	N = 187 Age (mean) = 12.96 63% male	a) Outcome: Violence Measure: Modified National Youth Survey Type: self-report	e) Superhero Bibliotherapy 8 sessions 1 session/week	No treatment	Targeted	2 foster homes in Israel	(a,c,e) 0.26 (b,c,e) 0.21 (a,c,f) -0.56 (b,c,f) 1.14

			Follow-up: (c) post-test (d) 3 months b) Outcome: Aggression Measure: Buss-Perry Aggression Questionnaire (Physical Aggression + Anger) Type: self-report Follow-up: (c) post-test (d) 3 months	50 min/session 1 BCT: 16.3 f) Affective Bibliotherapy 8 sessions 1 session/week 50 min/session 1 BCT: 16.3				(a,d,e) 0.52 (b,d,e) 0.52 (a,d,f) 0.07 (b,d,f) 0.23
Blake et al. (2017)	RCT	N = 144 Age (mean) = 14.48 40% male	Outcome: Aggression Measure: Youth Self Report (Aggressive Behavior) Type: self-report	Sleep SENSE 7 weeks 90 min/week 12 BCTs: 1.1, 1.2, 1.4, 1.5, 2.3, 3.1, 5.4, 8.1, 8.3, 11.2, 12.1, 13.2	Study skills educational program	Universal	University and school in Australia	0.20
Bonell et al. (2015)	CRCT	N = 1144 Age (mean) = 12.11 54% male	Outcome: Aggression Measure: AAYP violence subscale (4 items) Type: self-report	Initiating change Locally in bullying and Aggression Through the School Environment 8 months 3 BCTs: 3.1, 11.2, 12.2	No treatment	Universal	8 secondary schools in the UK	0.01
Bonell et al. (2018)	CRCT	N = 6667 Year 7 44.9% male	Outcome: Aggression Measure: Edinburgh Study of Youth Transitions and Crime Follow-up: (a) 24 months (b) 36 months	Learning Together 3 years 6 meetings per year 5-10 lessons per year 3 BCTs: 3.1, 11.2, 12.2	No treatment	Universal	40 secondary schools in the UK	(a) 0.03 (b) 0.01

Booth (1995)	RCT	N = 53 Age (mean) = 13.42 67% male	a) Outcome: Aggression Measure: Youth Self-Report checklist (Aggression) Type: self-report Follow-up: (c) post-test (d) 4 months b) Outcome: Aggression Measure: Teacher's Report Form (Aggression) Type: teacher report Follow-up: (c) post-test (d) 4 months	Chill-out program: anger control training 12 sessions 45min/session 19 BCTs: 1.3, 1.7, 2.3, 3.1, 3.2, 4.1, 4.2, 4.3, 5.3, 5.6, 6.1, 8.1, 8.2, 10.1, 10.2, 10.3, 10.4, 10.6, 13.2	Treatment as usual 1 BCT: 3.1	Targeted	Suburban junior high school in the US	(a,c) 0.56 (b,c) 1.01 (a,d) 0.25 (b,d) 0.63
Bosworth, Espelage, DuBay, Dahlberg, and Daytner (1996); Bosworth, Espelage, DuBay, Daytner, & Karageorge (2000)	CRCT	N = 558 6th, 7th and 8th grade 46% male	Outcome: Aggression Measure: Modified UT-Health Science Centre Aggression Scale + Conflict Tactic Scale Type: self-report Follow-up: 4 months	SMART Talk 16 weeks 40min/week 8 BCTs: 1.2, 1.8, 4.1, 4.2, 8.1, 8.2, 9.1, 13.2	No treatment	Universal	Suburban middle school in the US	0.04
Botvin, Griffin, and Nichols (2006)	CRCT	N = 4858 6th grade 51% male	Outcome: Physical aggression (a) Any (b) More than 3 times Type: self-report Follow-up: 3 months Outcome: Fighting (c) Any (d) More than 3 times Type: self-report	Life Skills Training 15 sessions 7 BCTs: 2.7, 6.1, 8.1, 8.2, 8.6, 10.3, 11.2	Standard health education curriculum	Universal	Public and parochial schools in the US	(a) 0.15 (b) 0.05 (c) 0.13 (d) 0.16

			Follow-up: 3 months					
Boulton and Flemington (1996)	CRCT	N = 170 Year 7-10 52% male	Outcome: Bullying Type: self-report	Sticks and Stones video watching + discussion 1 session 2 BCTs: 5.6, 9.1	Standard curriculum	Universal	Semi-rural secondary school in the UK	-0.07
Bunford (2016)	RCT	N = 16 Age (mean) = 16.3 100% male	a) Outcome: Physical Aggression Measure: Buss-Perry Aggression Questionnaire (Physical Aggression) Type: self-report b) Outcome: Physical Aggression Measure: Modified Overt Aggression Scale (Physical Aggression) Type: self-report	Interpersonal Skills Group 7 weeks 14 BCTs: 1.1, 1.2, 1.3, 1.6, 1.7, 2.2, 2.7, 4.1, 4.2, 5.3, 5.4, 8.1, 8.6, 8.7,	Waiting list	Targeted	Juvenile correctional facility in the US	(a) 0 (b) 0.11
Cappella and Weinstein (2006)	RCT	N = 134 Age (mean) = 10.5 100% female	a) Outcome: Aggression Measure: Modified Children's Social Behavior Scale (Overt Aggression) Type: peer nominations Follow-up: 3 weeks b) Outcome: Aggression Measure: Modified Children's Social Behavior Scale (Overt Aggression) Type: teacher report Follow-up: 3 weeks	Social Aggression prevention program 10 sessions in 10 weeks 1 session/week 40 minutes/session 7 BCTs: 1.2, 2.7, 4.1, 4.2, 5.3, 6.1, 8.2	Reading club	Universal	6 urban schools in the US	(a) 0.02 (b) -0.05
Carraro, Gobbi, and Moè (2014)	CRCT	N = 210 Age (mean) = 13.27 58% male	Outcome: Physical aggression	Play fighting in physical education 4 weeks 2 h/week	No treatment	Universal	2 suburban junior high schools in Italy	0.61

			Measure: Aggression Questionnaire short version (Physical Aggression) Type: self-report	3 BCTs: 4.1, 6.1, 8.1				
Castillo, Salguero, Fernández-Berrocal, & Balluerka (2013)	CRCT	N = 590 Age (mean) = 13.83 48% male	Outcome: Physical aggression Measure: Aggression Questionnaire (Physical Aggression) Type: self-report Follow-up: 6 months	INTEMO program 6 months 1h/2 weeks 6 BCTs: 1.2, 4.2, 5.3, 8.1, 11.2, 13.2	No treatment	Universal	8 public schools in Spain	0.22
Chapman, Buckley, Sheehan, and Shochet (2013)	CRCT	N = 314 Age (mean) = 13.6	Outcome: Violence Measure: Australian self-report Delinquency Scale (Violence Risk Behaviours) Type: self-report Follow-up: 6 months	Skills for Preventing Injury in Youth + school connectedness component 8 weeks 50min/week 5 BCTs: 4.2, 5.3, 8.1, 11.2, 13.2	No treatment	Universal	5 secondary schools in Australia	1.00
Chaux, Velásquez, Schultze-Krumbholz, & Scheithauer (2016)	CRCT	N = 1075 Age (mean) = 13.36 48% male	Outcome: Bullying Measure: European Cyberbullting Intervention Project Questionnaire (Traditionl Bullying) Type: self-report Follow-up: 6 months	a) Medienhelden long version 15 sessions 45 min/session 8 BCTs: 4.1, 5.3, 6.2, 8.1, 10.3, 11.2, 13.1, 13.2 b) Medienhelden short version 4 sessions 90 min/session 8 BCTs: 4.1, 5.3, 6.2, 8.1, 10.3, 11.2, 13.1, 13.2	Waiting list	Universal	5 schools in Germany	(a) 0.25 (b) 0.14

Cheng et al. (2008)	RCT	N = 166 Age (mean) = 13 66% male	a) Outcome: Fighting Type: self-report b) Outcome: Fighting with injuries Type: self-report c) Outcome: Weapon carrying Type: self-report	Mentoring + home visits + case management + list of community resources Minimum 6 sessions 2 to 6 months 5 BCTs: 1.3, 1.9, 4.1, 8.1, 12.2	Case management + list of community resources	Targeted	2 urban emergency departments in the US	(a) 0.04 (b) 0.19 (c) -0.19
Coleman, Pfeiffer, and Oakland (1992)	RCT	N = 52 Age (mean) = 15.75 74% male	Outcome: Aggression Measure: Behavior Incident Report Type: observation	Aggression Replacement Training 10 weeks 50h/week 20 BCTs: 1.2, 1.4, 2.2, 2.3, 4.1, 4.2, 5.3, 6.1, 6.2 8.1, 8.2, 8.4, 8.6, 9.1, 10.2, 10.4, 10.9, 13.2, 15.2, 15.4	No treatment	Targeted	Residential treatment centre in the US	-0.50
Crooks, Scott, Ellis, and Wolfe (2011); Wolfe et al. (2009)	CRCT	N = 1722 9th grade 47% male	a) Outcome: Physical aggression Measure: National Longitudinal Survey of Children and Youth Delinquent Behavior Inventory (3 items) Type: self-report Follow-up: 2 years b) Outcome: Physical aggression Measure: National Longitudinal Survey of Children and Youth Delinquent Behavior Inventory (8 items) Type: self-report	Fourth R: skills for youth Relationships + school-level components 21 sessions 1.25h/session 7 BCTs: 2.2, 4.1, 5.1, 5.3, 8.1, 8.2, 13.2	No treatment	Universal	20 high schools in Canada	(a) -0.05 (b) 0.05

			Follow-up: 2 years					
Cunningham et al. (2012); Walton et al. (2010)	RCT	N = 726 Age (mean) = 16.8 44% male	Outcome: Aggression Measure: unknown Type: self-report Follow-up: (a) 3 months (b) 6 months (c) 12 months	d) Computer brief intervention + brochure 1 session 30 minutes 10 BCTs: 1.3, 1.9, 2.2, 5.3, 6.2, 8.1, 9.2, 12.5, 13.2, 15.1 e) Therapist brief intervention + brochure 1 session 35 minutes 12 BCTs: 1.3, 1.6, 1.9, 2.2, 3.1, 5.3, 6.2, 8.1, 9.2, 12.5, 13.2, 15.1	Brochure 12.5	Targeted	Level I trauma centre in the US	(a,d) 0.17 (a,e) 0.30 (b,d) 0.00 (b,e) 0.10 (c,d) 0.06 (c,e) 0.28
Densley, Adler, Zhu, and Lambine (2017)	CRCT	N = 391 Age range: 12 – 14 60% male	Outcome: Violence Measure: Delinquency Inventory (3 items) Type: self-report Follow-up: (a) post-test (b) 1 month	Growing Against Gangs and Violence 5 weeks 6 sessions/5 weeks 4 BCTs: 5.1, 5.3, 8.1, 13.2	No treatment	Universal	4 schools in the UK	(a) 0.55 (b) 0.88
DeSmet et al. (2018)	CRCT	N = 249 8th grade 41.5% male	Outcome: Bullying Type: self-report Follow-up: (a) post-test (b) 1 month	Friendly ATTAC 1 session 6 BCTs: 2.2, 4.1, 6.3, 10.3, 13.1, 14.2	Waiting list	Universal	2 secondary schools in Belgium	(a) 0.09 (b) 0.35
Domino (2013)	CRCT	N = 336 Age (mean) = 12.2 46% male	Outcome: Bullying Measure: Peer Relations Questionnaire (Perpretation) Type: self-report	Take the lead 16 weeks 45 min/week 8 BCTs: 1.2, 4.1, 5.3, 6.2, 8.1, 8.2, 11.2, 13.4	Waiting list	Universal	Suburban middle school in the US	0.66

Eron et al. (2002)	CRCT	N = 2181 4th grade 61% male	Outcome: Aggression Measure: Peer Nomination Inventory (Aggression) + Teacher Report Form (Aggression) Type: peer and teacher report	a) Yes I Can curriculum + teacher consultation 16 months 1h/week 1 BCT: 12.2 b) Yes I Can curriculum + teacher consultation + small-group training 16 months 2h/week 10 BCTs: 1.2, 2.1, 2.2, 4.1, 5.2, 5.3, 8.1, 8.2, 10.2, 10.3, 10.6	No treatment	Universal and targeted	16 schools in the US	(a) -0.45 (b) -0.62
Espelage, Low, Polanin, and Brown (2013)	CRCT	N = 3616 Age (mean) = 11.24 52% male	Outcome: Fighting Measure: University of Illinois Fighting Scale Type: self-report	Second Step: Student success Through Prevention 15 weeks 50 min/week 15 BCTs: 1.2, 1.4, 1.9, 2.2, 4.1, 5.1, 5.3, 6.1, 8.1, 8.2, 8.6, 9.3, 11.2, 13.2, 15.4	Waiting list	Universal	36 schools in the US	0.20
Etscheidt (1984)	CRCT	N = 30 Age (mean) = 15.17 80% male	Outcome: Aggression Type: Observation Follow-up: (a) post-test (b) 2 weeks (c) 1 month	(c) Cognitive behavioural interpersonal problem solving 3 weeks 2.5h/week 15 BCTs: 1.1, 1.2, 1.4, 1.8, 2.1, 4.1, 4.2, 5.3, 5.6, 6.2, 8.1, 8.2, 9.3, 10.5, 10.6	Instruction in social skills	Targeted	School for chronically disruptive adolescents in the US	(a,c) 2.77 (a,d) 4.08 (b,c) 1.84 (b,d) 3.96

				(d) Cognitive behavioural interpersonal problem solving + reinforcement contingent 3 weeks 2.5h/week 15 BCTs: 1.1, 1.2, 1.4, 1.8, 2.1, 4.1, 4.2, 5.3, 5.6, 6.2, 8.1, 8.2, 9.3, 10.3, 10.6				
Farrell, Meyer, and White (2001)	CRCT	N = 626 Age (mean) = 11.7 50% male	Outcome: (a) Threatening (b) Weapon carrying (c) Threatening with a weapon (d) Fighting Measure: Problem Behavior Frequency Scales (Violent Behavior) Type: self-report Follow-up: (e) Post-test (f) 6 months	Responding in Peaceful and Positive Ways 25 weeks 50 min/week 6 BCTs: 1.2, 4.1, 8.1, 8.2, 12.3, 15.2	No treatment	Universal	3 public middle schools in the US	(a,e) 0.05 (b,e) 0.14 (c,e) -0.06 (d,e) 0.51 (a,f) 0.10 (b,f) 0.29 (c,f) 0 (d,f) 0.05
Farrell, Meyer, Sullivan, and Kung (2003)	CRCT	N = 476 Age (mean) = 12.8 47% male	Outcome: Violence Measure: Problem Behavior Frequenct Scale (Violent Behaviors) Type: self-report Follow-up: (a) post-test (b) 6 months	Responding in Peaceful and Positive Ways 6th Grade + Responding in Peaceful and Positive Ways 7th Grade + peer mediation 9 BCTs: 1.2, 1.9, 4.1, 4.3, 8.1, 9.3, 12.3, 13.2, 15.2	Responding in Peaceful and Positive Ways 6th Grade + peer mediation 5 BCTs: 4.1, 8.1, 1.2, 15.2, 12.3	Universal	2 middle schools in the US	(a) -0.11 (b) 0.03

Farrell, Valois, and Meyer (2002)	RCT	N = 204 6th grade 55% male	Outcome: Physical Aggression Measure: Problem Behavior Frequency Scale (Physical Agression) Type: self-report Follow-up: (a) post-test (b) 12 months	Responding in Peaceful and Positive Ways 6th grade 25 lessons 2 lessons/week 17 BCTs: 1.2, 1.8, 2.7, 3.1, 4.1, 4.2, 5.3, 6.1, 6.2, 8.1, 8.2, 9.2, 11.2, 12.3, 13.1, 15.2, 15.4	No treatment	Universal	Rural middle school in the US	(a) 0.28 (b) 0.01
Feindler, Ecton, Kingsley, and Dubey (1986)	CRCT	N = 21 Age range: 13-18 100% male	Outcome: Physical Aggression Type: Disciplinary records	The art of self-control 12 sessions in 8 weeks 13 BCTs: 1.2, 2.2, 2.3, 4.1, 4.2, 5.2, 5.3, 6.1, 8.1, 8.2, 10.2, 11.2, 15.4	Waiting list	Targeted	Psychiatric treatment facility in the US	0.13
Fekkes (2005)	CRCT	N = 2848 Age (mean) = 10.1 50% male	Outcome: Bullying Type: self-report Follow-up: (a) post-test (b) 1 year	Olweus anti-bullying program 9 months 7 BCTs: 1.1, 1.9, 2.2, 7.1, 8.1, 10.4, 10.11	No treatment	Universal	50 elementary schools in the Netherlands	(a) -0.06 (b) -0.10
Flewelling et al. (1999); Ringwalt, Graham, Paschall, Felwelling, and Browne (1996)	RCT	N = 255 Age (mean) = 14 100% male	Outcome: Weapon carrying Type: self-report Follow-up: (a) 6 months (b) 18 months	c) Supporting Adolescents with Guidance and Employment (SAGE): Afrocentric rites of passage (ROP) + summer job training and placement (JTP) + Junior Achievement (JA) ROP: 7 months (biweekly 2h seminars + mentoring) JTP: 6 weeks JA: 3 months (weekly sessions)	Waiting list	Targeted	US	(a,c) -0.37 (a,d) -0.24 (b,c) -0.16 (b,d) -0.25

				7 BCTs: 1.2, 3.1, 4.1, 5.3, 8.1, 8.2, 10.2 d) SAGE: JTP + JA JTP: 6 weeks JA: 3 months (weekly sessions) 3 BCTs: 4.1, 8.1, 10.2				
Foshee et al. (2014)	CRCT	N = 1886 Age (mean) = 13.9 49% male	Outcome: weapon carrying Type: self-report Follow-up: 1 year	Safe Dates 4 months 5 BCTs: 5.3, 6.3, 8.1, 12.5, 13.2	No treatment	Universal	14 public schools in the US	0.20
Franco, Amutio, López-González, Oriol, and Martínez-Taboada (2016)	RCT	N = 27 Age (mean) = 15.85 59% male	Outcome: Physical aggression Measure: Aggression Questionnaire (Physical Aggression) Type: self-report	Meditacion Fluir 10 sessions 1 h/week 6 BCTs: 1.4, 4.1, 8.1, 8.3, 11.2, 13.2	Waiting list	Targeted	High school in Spain	0.80
Friedman, Terras, and Glassman (2002)	RCT	N = 201 Age (mean) = 15.5 100% male	Outcone: Violence Measure: Adolescent Drug Abuse Diagnosis (Violent Offenses) Type: self-report Follow-up: 6 months	Botvin Life Skills Training + Prothow/Sith anti-violence + Values Clarification + Treatment as usual 9 weeks 5h/week 15 BCTs: 1.2, 1.3, 4.1, 4.2, 5.1, 5.3, 6.1, 6.3, 8.2, 10.3, 10.9, 11.2, 13.2, 13.5, 15.4	Treatment as usual	Targeted	Residential treatment facility in the US	-0.06
Garaigordobil and Martínez-Valderrey (2015)	CRCT	N = 176 Age range: 13 – 15 44% male	Outcome: Bullying Measure: Cyberbullying: Screening of Peer Harassment (Bullying) Type: self-report	Cyberprogram 2.0 19 weeks 1h/week 7 BCTs: 1.2, 4.1, 5.3, 5.6, 8.1, 11.2, 13.2	No treatment	Universal	3 secondary schools in Spain	0.84

Gilberg (1982)	RCT	N = 30 Age (mean) = 16.46 100% male	Outcome: Aggression Measure: Classroom Observation Checklist for Aggressiveness Type: Observation	Cognitive role-taking training 8 weeks 1h/week 3 BCTs: 2.2, 5.3, 8.1	1. Telling stories 2. No treatment	Targeted	School for boys in the US	0.75
Goldbeck and Schmid (2003)	RCT	N = 50 Age (mean) = 10.2 50% male	Outcome: Aggression Measure: Child Behavior Checklist (Aggression) Type: parent-report	Autogenic relaxation training 8 weeks 30 min/week 9 BCTs: 1.2, 2.3, 2.4, 4.1, 8.1, 8.3, 8.6, 11.2, 12.5	Waiting list	Targeted	Outpatient paediatric setting in Germany	0.28
Goldstein et al. (2018)	RCT	N = 70 Age (mean) = 17.45 100% female	a) Outcome: Physical Aggression Measure: Aggression Questionnaire (Physical Aggression) b) Outcome: Physical Aggression Measure: Peer Conflict Scale (Overt Aggression) c) Outcome: Reactive Aggression Measure: Peer Conflict Scale (Reactive Physical Aggression) d) Outcome: proactive aggression Measure: Peer Conflict Scale (Proactive Physical Aggression)	Juvenile Justice Anger Management Treatment for Girls + treatment as usual 8 weeks 2 sessions/week 90min/session 19 BCTs: 1.1, 1.2, 2.2, 3.1, 4.1, 4.2, 4.3, 5.3, 6.1, 8.1, 8.2, 8.6, 10.1, 10.2, 10.4, 11.2, 12.3, 13.2, 15.4	Treatment as usual	Targeted	3 residential juvenile justice facilities in the US	(a) 0.70 (b) 0.74 (c) 0.77 (d) 0.51

Goldstein, Dovidio, Kalbeitzer, Weil, and Strachan (2007)	CRCT	N = 12 Age (mean) = 15.8 100% female	a) Outcome: Aggression Measure: Aggression Questionnaire Type: self-report b) Outcome: Physical aggression Measure: Aggression Questionnaire (Physical Aggression) Type: self-report	Anger Management for Female Juvenile Offenders + treatment as usual 9 weeks 3h/week 13 BCTs: 1.1, 1.2, 1.4, 1.5, 4.2, 6.1, 8.1, 8.2, 10.2, 10.3, 11.2, 12.4, 15.4	Treatment as usual	Targeted	Residential juvenile justice facility in the US	(a) 4.10 (b) 0.78
Gottfredson, Cross, Wilson, Connell, and Rorie (2010); Gottfredson, Cross, Wilson, Rorie, and Connell (2010)	RCT	N = 447 Age (mean) = 12.22 54% male	Outcome: Aggression Measure: All Star questionnaire Type: self-report	All Stars + homework assistance + leisure activities + attendance monitoring and rewarding 30 weeks 3 sessions/week 3h/session 13 BCTs: 1.2, 1.3, 2.1, 3.2, 4.1, 6.2, 6.3, 8.1, 10.1, 10.2, 10.4, 13.3, 14.4	No treatment	Targeted	5 urban middle schools in the US	0.08
Griffin Jr, Holliday, Frazier, and Braithwaite (2009)	RCT	N = 199 8th grade 62% male	Outcome: Violence Measure: Monitoring the Future survey (5 items) Type: self-report	Building Resiliency and Vocational Excellence 6 months 10 BCTs: 1.3, 2.7, 3.1, 5.3, 6.1, 6.2, 6.3, 8.1, 8.6, 10.3	No treatment	Targeted	Middle school in the US	-0.17
Guerra and Slaby (1990)	RCT	N = 165 Age (mean) = 17.17 50% male	Outcome: Aggression Measure: Behavior Rating Scale (Aggressive Behavior) Type: staff report	Cognitive mediation training 12 weeks 1h/week	1. Basic skills sessions 2. No treatment	Targeted	Juvenile correctional facility in the US	0.82

				10 BCTs: 1.2, 1.3, 2.4, 4.1, 4.2, 4.3, 5.3, 8.1, 8.2, 13.2				
Gusmões, Sañudo, Valente, and Sanchez (2018)	CRCT	N = 8247 Age range: 11 - 15 49.1% male	a) Outcome: Bullying Type: self-report Follow-up: (c) 6 months (d) 18 months b) Outcome: Physical Aggression Type: self-report Follow-up: (c) 6 months (d) 18 months	Unplugged 12 weeks 1 lesson/week 50 min/lesson 16 BCTs: 1.2, 1.3, 2.1, 2.2, 2.3, 4.1, 4.2, 5.1, 5.3, 5.4, 6.2, 8.1, 8.2, 8.6, 13.1, 13.4	No treatment	Universal	72 elementary schools in Brazil	(a,c) 0 (b,c) -0.05 (a,d) -0.03 (b,d) -0.06
Hanewinkel, Isensee, Maruska, Sargent, and Morgenstern (2010)	CRCT	N = 3490 Age (mean) = 12.63 50% male	Outcome: Bullying Measure: unknown Type: self-report Follow-up: 1 month	Smokefree Class competition: be smart, don't start 6 months 3 BCTs: 1.1, 1.8, 10.6	No treatment	Universal	Schools in Germany	0.03
Harrington, Giles, Hoyle, Feeney, and Yungbluth (2001)	CRCT	N = 1655 Age (mean) = 12 45% male	Outcome: Violence Measure: items from delinquency scales Type: self-report Follow-up: (a) post-test (b) 1 year	All stars 5 BCTs: 1.3, 1.9, 5.3, 6.2, 6.3	No treatment	Universal	14 middle schools in the US	(a) -0.04 (b) -0.06
Hecht et al. (2008); Nieri, Apkarian, Kulis, and Marsiglia (2015)	CRCT	N = 581 Age (mean) = 11 46% male	a) Outcome: fighting Type: self-report Follow-up: 1 month b) Outcome: weapon carrying Type: self-report	Keepin' it REAL 10 sessions + 5 booster sessions 45 min/session 10 BCTs: 1.2, 4.1, 5.3, 6.1, 6.2, 6.3, 8.1, 11.2, 12.3, 13.3	No treatment	Universal	30 public schools in the US	(a) 0.01 (b) 0.17

			Follow-up: 1 month					
Herrmann and McWhirter (2003)	CRCT	N = 216 7th, 8th and 9th grade 45% male	a) Outcome: Aggression Measure: Missouri Peer Relations Inventory (Aggression) Type: self-report b) Outcome: Aggression Measure: Missouri Peer Relations Inventory (Aggression) Type: parent-report c) Outcome: Aggression Type: official records	Student-Created Aggression Replacement Education 8weeks 30 min/week 8 BCTs: 2.3, 4.1, 4.2, 4.3, 8.1, 8.2, 11.2, 15.4	Enter here curriculum	Targeted	2 alternative schools in the US	(a) 0.03 (b) 0.01 (c) -0.19
Hudley and Graham (1993)	RCT	N = 24 Age (mean) = 10.5 100% male	a) Outcome: Aggression Measure: Teacher Checklist (aggression) Type: teacher report b) Outcome: Reactive Aggression Measure: Teacher Checklist (reactive aggression) Type: teacher report	Attribution retraining program 6 weeks 2h/week 4 BCTs: 1.4, 4.2, 4.3, 8.1	1. Building thinking skills 2. No treatment	Targeted	Two elementary schools in the US	a) 0.59 b) 0.52
Huey (1984)	RCT	N = 48 8th-9th grade 100% male	Outcome: Aggression Measure: Walker Problem Behavior Identification Checklist (Acting-Out) Type: teacher report	1. Counsellor-led assertive training 4 weeks 2.5h/week 4 BCTs: 2.2, 6.1, 8.1, 10.2 2. Peer-led assertive training 4 weeks	1. Counsellor-led discussion group 2. Peer-led discussion group 3. No treatment	Targeted	Urban high school in the US	1.19

				2.5h/week 4 BCTs: 2.2, 6.1, 8.1, 10.3				
Johnston, Rivara, Droesch, Dunn, and Copass (2002)	RCT	N = 631 Age (mean) = 16.4 65.2% male	Outcome: Weapon carrying Type: self-report Follow-up: (a) 3 months (b) 6 months	Behaviour Change Counselling 1 session of 20 minutes 3 BCTs: 3.1, 13.3, 15.1	No treatment	Universal	Emergency department in the US	(a) -0.10 (b) 0.19
Jones (1991)	RCT	N = 18 Age (mean) = 13.75 50% male	Outcome: Aggression Measure: Behavior Incident Report Type: observation	a) Aggression Replacement Training 10 weeks 3h/week 19 BCTs: 1.2, 1.4, 2.2, 4.1, 4.2, 5.3, 6.1, 6.2, 8.1, 8.2, 8.4, 8.6, 9.1, 10.2, 10.4, 10.9, 13.2, 15.2, 15.4 b) Moral reasoning 10 weeks 1 h/week 3 BCTs: 1.2, 6.2, 13.2	No treatment	Targeted	High school in Australia	(a) 0.75 (b) -0.06
Jordans et al. (2010)	CRCT	N = 325 Age (mean) = 12.7 51% male	Outcome: Physical aggression Measure: Aggression Questionnaire (Physical Aggression) Type: self-report	Classroom-based intervention 5 weeks 3h/week 5 BCTs: 8.1, 11.2, 12.5, 13.2, 15.4	Waiting list	Targeted	4 schools in Nepal	0.11
Karataş (2011)	RCT	N = 36 9^{th}-11^{th} grade 50% male	Outcome: Aggression Measure: Scale of Determining Conflict Resolution Behavior (Aggression) Type: self-report	Psychodrama 10 weeks 1 session/week 90-120 min/session 4 BCTs: 2.7, 8.1, 11.2, 13.4	1. No treatment 2. Interaction group	Targeted	High school in Turkey	1.70

Karataş and Gökçakan (2009)	RCT	N = 36 9th grade 48% male	a) Outcome: Aggression Measure: Aggression Scale Type: self-report b) Outcome: Physical aggression Measure: Aggression Scale (Physical Aggression) Type: self-report	c) Cognitive Behavior Therapy 10 sessions 1 session/week 90-120 min/session 1 BCT: 3.1 d) Psychodrama 14 sessions 1 session/week 90-120 min/session 2 BCTs: 2.7, 11.2	No treatment	Targeted	High school in Turkey	(a,c) 4.42 (b,c) 3.37 (a,d) 2.51
Kärnä et al. (2013)	CRCT	N = 19191 8th and 9th grade	a) Outcome: Bullying Measure: Olweus' Bully/Victim Questionnaire (Bullying) Type: self-report b) Outcome: Bullying Measure: Participant Role Questionnaire (Bullying) Type: peer nominations	KiVa Antibullying program + internet forum 13-23 lessons 6 BCTs: 3.1, 5.3, 8.1, 12.2, 12.5, 13.2	No treatment	Universal and targeted	78 schools in Finland	(a) 0.04 (b) 0 (b,m) 0.11 (b,f) 0
Kazdin, Esveldt-Dawson, French, and Unis (1987)	RCT	N = 56 Age (mean) = 10.9 80% male	Outcome: Aggression Measure: School Behavior Checklist (aggression) Type: teacher-report Follow-up: (a) 1 month (b) 1 year	c) Cognitive behavioural problem solving skills training 10 weeks 1.5h/week 10 BCTs: 1.2, 2.2, 3.1, 6.1, 7.4, 8.1, 10.2, 10.4, 14.1, 14.2 d) Nondirective relationship theory 10 weeks 1.5h/week	Sessions with therapist 4 BCTs: 3.1, 7.4, 14.2, 14.3	Targeted	Psychiatric hospital in the US	(a,c) 0.96 (a,d) 0.24 (b,c) 0.65 (b,d) -0.21

				6 BCTs: 3.1, 3.3, 7.4, 10.2, 14.2, 14.3				
Kliewer et al. (2011)	CRCT	N = 258 7th grade 45% male	a) Outcome: Physical Aggression Measure: Problem Behavior Frequency Scale (Physical Aggression) Type: self-report Follow-up: (c) 2 months (d) 6 months b) Outcome: Aggression Measure: Teacher Report Form (Aggressive Behavior) Type: teacher report Follow-up: (c) 2 months (d) 6 months	e) Standard expressive writing 5 weeks 1h/week 3 BCTs: 4.1, 6.1, 8.1 f) Enhanced expressive writing 5 weeks 1h/week 3 BCTs: 4.1, 6.1, 8.1	Non-emotional writing 3 BCTs: 4.1, 6.1, 8.1	Targeted	3 urban middle schools in the US	(a,c,e) -0.12 (b,c,e) 0.48 (a,c,f) -0.12 (b,c,f) 0.17 (a,d,e) -0.02 (b,d,e) -0.09 (a,d,f) -0.09 (b,d,f) -0.06
Komro et al. (2004); Perry et al. (2003)	CRCT	N = 6237 Age (mean) = 13 52% male	a) Outcome: physical aggression Measure: Physical Violence Scale Type: self-report b) Outcome: Weapon carrying Measure: Weapon Carrying Scale Type: self-report	c) Drug Abuse Resistance Education 10 weeks 13 BCTs: 1.2, 1.4, 5.1, 5.3, 6.2, 8.1, 8.2, 9.1, 9.2, 10.4, 10.11, 12.3, 13.2 d) Drug Abuse Resistance Education + Play and Learning Under supervision 14weeks 15 BCTs: 1.2, 1.4, 4.1, 5.1, 5.3, 6.2, 8.1, 8.2, 9.1, 9.2, 10.4, 10.11, 12.2, 12.3, 13.2	Waiting list	Universal	24 middle schools in the US	(a,c,m) -0.03 (a,d,m) 0.1 (a,c,f) -0.13 (a,d,f) -0.03 (b,c,m) 0.07 (b,d,m) 0.10 (a,c,f) -0.11 (a,d,f) -0.07

Kozina (2018)	CRCT	N = 73 8th grade 47% male	Outcome: Physical Aggression Measure: Aggression Scale for Pupils and Students Type: self-report Follow-up: (a) post-test (b) 6 months	My friends 10 workshops + 2 booster sessions 1 session/week 45 min/workshop 7 BCTs: 1.2, 4.1, 8.1, 10.3, 10.9, 11.2, 15.4	No treatment	Universal	2 urban schools in Slovenia	(a) 0.54 (b) 0.45
Krahé and Busching (2015); Möller, Krahé, Busching, and Krause (2012)	RCT	N = 683 Age (mean) = 13.3 50% male	Outcome: Physical aggression Measure: unknown Type: self-report Follow-up: (a) 18 months (b) 30 months	Class-based intervention 5 weeks 1.5 h/week 6 BCTs: 2.3, 5.3, 7.1, 8.1, 8.2, 13.2	No treatment	Universal	10 secondary schools in Germany	(a) 0 (b) -0.14
Lee, Hallberg, and Hassard (1979)	RCT	N = 30 9th grade 80% male	a) Outcome: Aggression Measure: Self-rated scale Type: self-report b) Outcome: Aggression Type: peer nominations	Assertion training 8 weeks 50 min/week 7 BCTs: 1.2, 2.2, 2.3, 6.1, 6.2, 8.1, 15.2	1. How to make a decision 2. No treatment	Targeted	Secondary school in Canada	(a) 1.16 (b) 0.08
Li and Chen (2017)	RCT	N = 40 Age (mean) = 10.13 40% male	Outcome: physical aggression Measure: Aggression Questionnaire (physical aggression) Type: self-report	Neurofeedback training program 20 sessions 3 sessions/week 30 min/session 4 BCTs: 2.7, 4.1, 8.1, 8.7	Developing training course	Targeted	Schools in China	0.02
Lindstrom Johnson, Jones, and Cheng (2015)	RCT	N = 200 Age (mean) = 16.68 40% male	Outcome: Fighting Measure: United States Youth Risk Behavior Surveillance System (Violence)	Healthy futures 5 months 1session/month 6 BCTs: 1.2, 3.1, 1.3, 8.1, 3.2, 1.6	TAU	Universal	Paediatric primary care clinic in the US	0.05

			Type: self-report					
Lochman, Burch, Curry, and Lampron (1984); Lochman, Lampron, Burch, and Curry (1985)	RCT	N = 76 Age (mean) = 11.17 100% male	Outcome: Aggression Measure: Missouri Children's Behavior Checklist (Aggression) Type: parent and techer report Follow-up: 1 month	a) Anger coping 12 weeks 1h week 9 BCTs: 1.2, 4.2, 5.3, 6.1, 6.2, 8.1, 8.2, 8.6, 15.4 b) Goal setting 12 weeks 1h week 3 BCTs: 1.3, 2.5, 10.3 c) Anger coping + goal setting 12 weeks 1h week 12 BCTs: 1.2, 1.3, 2.5, 4.2, 5.3, 6.1, 6.2, 8.1, 8.2, 8.6, 10.3, 15.4	No treatment	Targeted	8 suburban schools in the US	(a) 0.30 (b) -0.60 (c) 0.30
Moody (1981)	RCT	N = 24 Age (mean) = 13.9 100% male	a) Outcome: Aggression Measure: Pittsburgh Adjustment Survey Scales (Aggressive Behavior) Type: teacher report b) Outcome: Aggression Type: teacher observation	Assertion training 5 weeks 1.5h/week 11 BCTs: 2.2, 4.1, 5.3, 5.4, 5.6, 6.1, 6.2, 8.1, 8.2, 8.6, 10.4	1. Group counselling 2. No treatment	Targeted	Middle school in US	(a) -1.04 (b) -2.26
Moore and Shannon (1993)	RCT	N = 58 Age (mean) = 14	Outcome: Aggression Measure: Formal Incident Report (aggressive behavior) Type: observation	Anger control treatment 10 weeks 2.5h/week 7 BCTs: 2.3, 2.7, 4.2, 10.2, 10.4, 14.1, 15.4	Treatment as usual 4 BCTs: 2.7, 10.2, 10.4, 14.1	Targeted	Residential treatment facility in the US	-0.06

Multisite Violence Prevention Project (2014)	CRCT	N = 2780 6th grade 65% male	a) Outcome: Physical Aggression Measure: Behavioral Assessment System for Children + Problem Behavior Frequency Scale Type: teacher + parent + self-report Follow-up: (c) post-test (d) 2 years b) Outcome: Aggression Measure: Behavioral Assessment System for Children Type: teacher-report Follow-up: (c) post-test (d) 2 years	Guiding Responsibility and Expectations for Adolescents for Today and Tomorrow (GREAT) for students + GREAT for teachers 1 year 20 sessions 15 BCTs: 1.2, 1.9, 4.1, 4.2, 5.3, 6.1, 8.1, 8.2, 9.3, 10.6, 11.2, 12.3, 13.2, 15.2, 15.4	No treatment	Universal	37 middle schools in the US	(a,c) 0.08 (b,c) 0.01 (a,d) 0.03 (b,d) 0.06
Newton (1994)	RCT	N = 48 7th and 8th grade 76% male	Outcome: Violence Measure: school referrals Type: official records	Aim high: students helping students (mentoring program) 16 weeks 1h/week 2 BCTs: 3.1, 3.2	No treatment	Targeted	Urban middle school in the US	0.72
Nocentini and Menesini (2016)	CRCT	N = 1045 Age (mean) = 10.93 49% male	Outcome: Bullying Measure: Florence Bullying Scale (perpetration) + Olweus' global key question (bullying)	KiVa 10 lessons 90 min/lesson 9 BCTs: 1.2, 1.8, 4.1, 4.3, 5.3, 8.1, 12.2, 12.5, 13.1	No treatment	Universal and targeted	13 schools in Italy	0.21
Parker and Kupersmidt (2016)	CRCT	N = 118 Age (mean) = 11.7	Outcome: Aggression Type: teacher report	Moment 4 weeks 20 lessons 1 lesson/day	Waiting list	Universal	Middle-schools in the US	1.21

				15min/lesson 12 BCTs: 1.2, 1.4, 2.1, 4.1, 4.3, 6.1, 8.1, 8.2, 8.3, 8.6, 9.1, 11.2				
Parker, Kupersmidt, Mathis, Scull, and Sims (2014)	CRCT	N = 111 Age (mean) = 10.09 42% male	Outcome: Aggression Measure: Child Behavior Checklist (Aggression) Type: Teacher report	Master Mind 20 lessons 4 weeks 1 lesson/day 15 min/lesson 15 BCTs: 1.2, 1.4, 4.1, 4.3, 5.3, 6.1, 8.1, 8.3, 8.6, 9.1, 10.4, 10.5, 11.2, 13.4, 15.4	Waiting list	Universal	2 elementary schools in the US	0.54
Petit (1998)	RCT	N = 90 Age (mean) = 16 47.30% male	a) Outcome: Aggression Measure: Teacher's Report Form (Aggression) Type: teacher report b) Outcome: Anger-Out Measure: State-Trait Anger Expression Inventory (Anger-Out) Type: self-report	Anger Management for Youth: Stemming Aggression and Violence 9 weeks 2 sessions/week 50 min/session 16 BCTs: 1.1, 1.2, 1.5, 2.2, 2.3, 3.1, 4.1, 4.2, 4.3, 5.3, 5.5, 8.1, 8.2, 8.6, 10.3, 15.4	1. No treatment 2. Educational videos	Targeted	Alternative education centres in the US	(a) -0.64 (b) -0.08
Puskar, Ren, and McFadden (2015)	RCT	N = 179 Age (mean) = 15.61 48% male	a) Outcome: Physical aggression Type: self-report Follow-up: (c) post-test (d) 6 (e) 12 months b) Outcome: Anger-out Measure: State-Trait Anger Expression Inventory 2 (Anger-Out)	Teaching Kids to Cope with Anger 8 weeks 1 h/week 7 BCTs: 1.2, 4.1, 4.2, 5.3, 8.1, 11.2, 13.2	No treatment	Universal	3 rural public high schools in the US	(a,c) -0.26 (b,c) -0.02 (a,d) 0.07 (b,d) 0.11 (a,e) -0.08 (b,e) -0.00

			Type: self-report Follow-up: (c) post-test (d) 6 months (e) 12 months					
Şahin (2012)	RCT	N = 38 6th grade	Outcome: Bullying Measure: Scale of Identifying Bullying Type: self-report Follow-up: 2 months	Empathy training 11 sessions 1 session/week 75 min/session 6 BCTs: 2.2, 3.1, 4.1, 6.1, 6.2, 8.1	Discussion about daily issues	Targeted	Primary schools in Turkey	6.36
Shechtman (2000)	RCT	N = 70 Age range: 10 – 16 71% male	a) Outcome: Aggression Measure: Youth Self Report (Aggression) Type: self-report b) Outcome: Aggression Measure: Teacher Report Form (Aggression) Type: teacher report	Bibliotherapy and clarifying processes 10weeks 45 min/week 13 BCTs: 1.1, 1.2, 3.3, 4.1, 4.2, 4.3, 5.3, 5.6, 6.3, 8.1, 8.2, 9.2, 11.2	Waiting list	Targeted	Special education classrooms in 10 schools in Israel	(a) 0.63 (b) 0.42
Shechtman and Ifargan (2009)	CRCT	N = 904 5th, 6th, 7th and 8th grade 57% male	a) Outcome: Aggression Measure: Aggression Questionnaire Type: self-report b) Outcome: Physical aggression Measure: Aggression Questionnaire (Physical Aggression) Type: self-report c) Outcome: Physical aggression	d) Psychoeducational intervention 4 months 1h/week 5 BCTs: 1.1, 1.2, 1.3, 3.1, 8.1 e) Counselling 4 months 1h/week 8 BCTs: 1.1, 1.2, 1.3, 4.1, 4.2, 5.3, 5.6, 10.4	No treatment	f) Universal g) Targeted	Elementary and junior high schools in Israel	(a,d,f) 0.37 (b,d,f) 0.28 (c,d,f) 0.37 (a,e,f) 0.39 (a,e,f) 0.31 (a,e,f) 0.26 (a,d,g) 0.72 (b,d,g) 0.65 (c,d,g) 0.35 (a,e,g) 0.66 (a,e,g) 0.55 (a,e,g) 0.45

			Measure: Illinois Aggression Scale (Physical Aggression) Type: self-report					
Shetgiri, Kataoka, Lin, and Flores (2011)	CRCT	N = 108 9th grade 42% male	Outcome: Fighting (a) Last 3 months (b) Last 12 months Type: self-report Follow-up: 1 month	School-based violence and substance use prevention program + field trips and community service 7 months 40 min/week 10 BCTs: 1.2, 1.3, 2.2, 3.1, 4.1, 5.1, 6.2, 8.1, 11.2, 13.2	No treatment	Targeted	Urban high school in the US	(a) 0.05 (b) -0.16
Shinde et al. (2018)	CRCT	N = 13035 9th grade 54% male	Outcome: Violence Type: self-report	a) Strengthening Evidence Base on School-Based Interventions for Promoting Adolescent Health Program (SEHER) delivered by counsellor + AEP 8 months Several activities each month, one assembly per week 3 BCTs: 3.1, 8.1, 10.4 b) SEHER delivered by teacher + AEP 8 months Several activities each month, one assembly per week 3 BCTs: 3.1, 8.1, 10.4	Adolescent Education Program (AEP)	Universal and targeted	Government-run secondary schools in India	(a) 0.21 (b) -0.17

Shlafer, McMorris, Sieving, and Gower (2013); Sieving et al. (2011)	RCT	N = 253 Age (mean) = 15.59 100% female	Outcome: Violence Measure: Add Health (5 items) Type: self-report	Prime Time 18months 1 session /week 11 BCTs: 1.2, 2.3, 2.4, 3.1, 8.1, 10.2, 10.9, 11.2, 12.2, 13.1, 13.2	No treatment	Targeted	US	-0.12
Silvia et al. (2010); Silvia et al. (2011)	CRCT	N = 10717 6th grade 49% male	a) Outcome: Physical Aggression Measure: Problem Behavior Frequency Scale (Aggression) Type: self-report b) Outcome: Weapon carrying Measure: Problem Behavior Frequency Scale (Weapons-related) Type: self-report c) Outcome: Physical aggression Measure: Problem Behavior Frequency Scale (Not weapons-related) Type: self-report	Responding in Peaceful and Positive Ways + Best Behavior program 3 school years 16 lessons/school year 50 min/lesson 22 BCTs: 1.2, 1.9, 4.1, 4.2, 4.3, 5.3, 6.1, 8.1, 8.2, 8.6, 9.3, 10.3, 10.6, 10.11, 11.2, 12.3, 13.1, 13.2, 14.2, 14.8, 15.2, 15.4	No treatment	Universal	40 middle schools in the US	(a) -0.01 (b) -0.05 (c) -0.01
Simon, Sussman, Dahlberg, and Dent (2002); Sussman et al. (1997); Sussman, Dent, and Stacy	CRCT	N = 2863 Age (mean) = 16.8 55% male	a) Outcome: Violence Type: self-report Follow-up: 1 year b) Outcome: Weapon carrying Type: self-report Follow-up: 1 year	Project Towards No Drug Abuse 3 weeks 2.5h/week 12 BCTs: 1.9, 3.2, 4.1, 4.2, 4.3, 5.3, 6.2, 6.3, 8.2, 9.2, 11.2, 13.2	No treatment	Targeted	21 continuation high schools in the US	(a,m) 0.11 (a,f) -0.06 (b,m) 0.22 (b,f) -0.17

(2002); Sussman, Dent, Stacy, and Craig (1998)								
Singh (2017)	RCT	N = 126 Age (mean) = 13.4 56% male	a) Outcome: Physical Aggression Measure: Aggression Questionnaire (Physical Aggression) Type: self-report b) Outcome: Aggression Measure: Aggression Questionnaire Type: self-report	Social Cognitive intervention 6 weeks 1 session/week 70 min/session 12 BCTs: 1.2, 2.2, 2.3, 2.4, 2.7, 4.2, 4.3, 5.3, 5.4, 8.1, 8.6, 9.2	Study skills	Targeted	Schools in India	(a) 1.03 (b) 0.96
Stallard et al. (2010); Stallard et al. (2013)	CRCT	N = 5761 Years 8, 9, 10 and 11 53% male	Outcome: Bullying Measure: Olweus Bully/Victim Questionnaire (Bullying) Type: self-report Follow-up: (a) post-test (b) 6 months	Resourceful Adolescent Programme 11 sessions 1h/session 7 BCTs: 1.2, 3.1, 8.1, 8.2, 11.2, 13.2, 13.4	1. Standard curriculum with facilitators 2. No treatment	Universal	8 schools in the UK	(a) 0.05 (b) 0.05
Stevens, Bourdeaudhuij, and Oost (2000)	CRCT	N = 1104 Age range: 10 – 16	Outcome: Bullying Measure: Bullying Inventory (Bullying) + Life in School Checklist (Bully) Type: self-report Follow-up: (a) post-test (b) 1 year	c) Flemish anti-bullying intervention + support from research group 4 weeks 1.5h/week 9 BCTs: 3.3, 4.1, 5.3, 6.1, 8.1, 8.2, 10.1, 13.2, 14.2 d) Flemish anti-bullying intervention 4 weeks	No treatment	Universal	(e) 9 primary schools (f) 9 secondary schools in Belgium	(a,c,e) 0.18 (a,d,e) 0.15 (a,c,f) -0.21 (a,d,f) 0.09 (b,c,e) 0.44 (b,d,e) 0.52 (b,c,f) -0.10 (b,d,f) 0.09

				1.5h/week 9 BCTs: 3.3, 4.1, 5.3, 6.1, 8.1, 8.2, 10.1, 13.2, 14.2				
Stoltz et al. (2013)	CRCT	N = 271 4th grade 71% male	Outcome: (a) Reactive Aggression (b) Proactive Aggression Measure: Teacher Rating of Aggression (child version) Type: self-report Outcome: (c) Reactive Aggression (d) Proactive Aggression Measure: Teacher Rating of Aggression Type: teacher report Outcome: (e) Reactive Aggression (f) Proactive Aggression Measure: Teacher Rating of Aggression (parent version) Type: parent report (h) Mother (i) Father g) Outcome: Aggression Measure: Social Information Processing test Type: self-report	Stay Cool Kids 8 weeks 1 session/week 45 min/session 11 BCTs: 1.2, 1.3, 1.8, 2.3, 4.2, 8.1, 8.2, 8.6, 11.2, 13.2, 13.4	No treatment	Targeted	48 elementary schools in the Netherlands	(a) 0.21 (b) 0.22 (c) 0.28 (d) 0.30 (e,h) 0.32 (f,h) 0.18 (e,i) 0.11 (f,i) 0.3 (g) 0
Swaim and Kelly (2008)	CRCT	N = 1492 7th and 8th grade 47% male	Outcome: Physical aggression Type: self-report	Resolve it, Solve it 2 years 2 BCTs: 6.1, 12.5	No treatment	Universal	6 rural middle schools in the US	(m) -2.19 (f) 0.17

Uzunoglu and Baysan Arabaci (2017)	RCT	N = 16 Age (mean) = 16 50% male	Outcome: Anger-out Measure: State-Trait Anger Expression Inventory (Anger-Out) Type: self-report	Anger Management Education Program 6 weeks 1 session/week 60 min/session 5 BCTs: 1.2, 4.1, 4.2, 4.3, 8.1	Waiting list	Targeted	Psychiatric hospital in Turkey	0.63
Van Manen, Prins, and Emmelkamp (2004)	RCT	N = 97 Age (mean) = 11.2 100% male	a) Outcome: Reactive Aggression Measure: Teacher Rating Scale for Reactive and proactive Aggression (Reactive Aggression) Type: teacher-report b) Outcome: Proactive Aggression Measure: Teacher Rating Scale for Reactive and proactive Aggression (Proactive Aggression) Type: teacher-report	c) Social cognitive intervention program 11 weeks 70min/week 16 BCTs: 1.2, 2.7, 4.1, 4.2, 5.3, 7.1, 8.1, 8.6, 9.2, 10.4, 10.6, 10.9, 13.2, 14.3, 14.4, 15.4 d) Social skills training 11 weeks 70min/week 6 BCTs: 6.1, 7.1, 8.1, 8.2, 10.2, 14.1	Waiting list	Targeted	Outpatient mental health clinic in the Netherlands	(a,c) 0.55 (b,c) 0.17 (a,d) 0.17 (b,d) -0.51
Wade, Smith, Duncan, and Lubans (2018)	CRCT	N = 361 Age (mean) = 12.7 100% male	Outcome: Aggression Measure: Aggression Scale Type: self-report	Acting Teens Avoiding Screen Time 8 months 9 BCTs: 1.1, 2.2, 2.3, 3.1, 4.1, 5.3, 8.1, 8.7, 13.1	Waiting list	Targeted	14 secondary schools in Australia	0.10
Wagner, Hospital, Graziano, Morris and Gil (2014)	RCT	N = 514 Age (mean) = 16.24 59% male	Outcome: Aggression Measure: Timeline Follow-Back (1 item) Type: self-report Follow-up: (a) post-test (b) 3 months (c) 6 months	Guided self-change 5 weeks 1session/week 8 BCTs: 1.2, 1.3, 2.2, 2.3, 3.1, 5.1, 6.2, 9.2	TAU	Targeted	16 high schools in the US	(a) 0.23 (b) -0.21 (c) -0.39

Yorgun (2007)	RCT	N = 24 9th and 10th grade	a) Outcome: Violence Measure: Violent Behavior Checklist (Physical violence) Type: self-report b) Outcome: Proactive aggression Measure: Violent Behavior Checklist (Instrumental violence) Type: self-report	Violence Management training 8 weeks 2 sessions/week 50 min/session 14 BCTs: 1.2, 1.4, 3.3, 4.1, 4.2, 4.3, 5.3, 8.1, 8.2, 8.6, 9.3, 12.4, 13.2, 15.4	No treatment	Targeted	School in Turkey	(a) -0.20 (b) 0.63
Zimmerman (1987)	CRCT	N = 36 Age (mean) = 15.75 100% male	a) Outcome: Aggression Measure: Behavior Incident Report (aggression intensity) Type: observation b) Outcome: Aggression Measure: Behavior Incident Report (aggression frequency) Type: observation	Aggression Replacement Training 10 weeks 3h/week 22 BCTs: 1.2, 1.4, 2.2, 2.3, 4.1, 4.2, 5.3, 6.1, 6.2, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 10.2, 10.4, 10.5, 10.9, 13.2, 15.2, 15.4	No treatment	Targeted	Youth residential facility for delinquent boys in the US	a) 0.42 b) 0.43

Notes. Subscales used are between brackets under the measure. If follow-up is not indicated, the measure was taken only within one week after the intervention; m = males; f = females.

[a] Effect sizes in Cohen's *d*. Letters in brackets indicate for which outcome, follow-up and intervention group is the effect size.

References

Abdulmalik, J., Ani, C., Ajuwon, A. J., & Omigbodun, O. (2016). Effects of problem-solving interventions on aggressive behaviours among primary school pupils in Ibadan, Nigeria. *Child and Adolescent Psychiatry and Mental Health*, *10*(1), 31. https://doi.org/10.1186/s13034-016-0116-5

Atria, M., & Spiel, C. (2007). Viennese Social Competence (ViSC) Training for Students: Program and Evaluation. In J. E. Zins & C. A. Maher (Eds.), *Bullying, victimization, and peer harassment: A handbook of prevention and intervention* (pp. 179–197). New York, NY, US: Haworth Press.

Baldry, A. C., & Farrington, D. P. (2004). Evaluation of an intervention program for the reduction of bullying and victimization in schools. *Aggressive Behavior*, *30*(1), 1–15. https://doi.org/10.1002/ab.20000

Barekatain, M., Taghavi, T., Salehi, M., & Hasanzadeh, A. (2006). The Efficacy of Rational-Emotive-Behavioral versus Relaxation Group Therapies in Treatment of Aggression of Offspring of Veterans with Post Traumatic Stress Disorder. *Journal of Research in Medical Sciences*, *11*(1), 34–40.

Blake, M. J., Snoep, L., Raniti, M., Schwartz, O., Waloszek, J. M., Simmons, J. G., … Allen, N. B. (2017). A cognitive-behavioral and mindfulness-based group sleep intervention improves behavior problems in at-risk adolescents by improving perceived sleep quality. *Behaviour Research and Therapy*, *99*, 147–156. https://doi.org/10.1016/j.brat.2017.10.006

Bonell, C., Allen, E., Warren, E., McGowan, J., Bevilacqua, L., Jamal, F., … Viner, R. M. (2018). Effects of the Learning Together intervention on bullying and aggression in English secondary schools (INCLUSIVE): A cluster randomised controlled trial. *The Lancet*, *392*(10163), 2452–2464. https://doi.org/10.1016/S0140-6736(18)31782-3

Bonell, C., Fletcher, A., Fitzgerald-Yau, N., Hale, D., Allen, E., Elbourne, D., … Viner, R. (2015). Initiating change locally in bullying and aggression through the school environment (INCLUSIVE): A pilot randomised controlled trial. *Health Technology Assessment*, *19*(53), 1–110. https://doi.org/10.3310/hta19530

Booth, B. A. (1995). *A cognitively-based anger control training program with aggressive adolescents in the school setting.* University at albany, State University of New York, Ann Arbor.

Bosworth, K., Espelage, D., DuBay, T., Dahlberg, L. L., & Daytner, G. (1996). Using Multimedia to Teach Conflict-Resolution Skills to Young Adolescents. *American Journal of Preventive Medicine*, *12*(5, Supplement), 65–74. https://doi.org/10.1016/S0749-3797(18)30238-1

Bosworth, K., Espelage, D., DuBay, T., Daytner, G., & Karageorge, K. (2000). Preliminary Evaluation of a Multimedia Violence Prevention Program for Adolescents. *American Journal of Health Behavior*, *24*(4), 268–280. https://doi.org/10.5993/AJHB.24.4.3

Botvin, G. J., Griffin, K. W., & Nichols, T. D. (2006). Preventing Youth Violence and Delinquency through a Universal School-Based Prevention Approach. *Prevention Science*, *7*(4), 403–408. https://doi.org/10.1007/s11121-006-0057-y

Boulton, M. J., & Flemington, I. (1996). The Effects of a Short Film Intervention on Secondary School Pupils' Involvement in Definitions of and Attitudes Towards Bullying. *School Psychology International*, *17*(4), 331–345. https://doi.org/10.1177/0143034396174003

Bunford, N. (2016). *Interpersonal Skills Group—Corrections Modified for Detained Juvenile Offenders with Externalizing Disorders: A Controlled Pilot Clinical Trial* (Ohio University). Retrieved from https://etd.ohiolink.edu/pg_10?::NO:10:P10_ETD_SUBID:113046

Cappella, E., & Weinstein, R. (2006). The Prevention of Social Aggression Among Girls. *Social Development*, *15*(3), 434–462. https://doi.org/10.1111/j.1467-9507.2006.00350.x

Carraro, A., Gobbi, E., & Moè, A. (2014). Brief report: Play fighting to curb self-reported aggression in young adolescents. *Journal of Adolescence*, *37*(8), 1303–1307. https://doi.org/10.1016/j.adolescence.2014.09.009

Castillo, R., Salguero, J. M., Fernández-Berrocal, P., & Balluerka, N. (2013). Effects of an emotional intelligence intervention on aggression and empathy among adolescents. *Journal of Adolescence*, *36*(5), 883–892. https://doi.org/10.1016/j.adolescence.2013.07.001

Chapman, R. L., Buckley, L., Sheehan, M., & Shochet, I. M. (2013). Pilot evaluation of an adolescent risk and injury prevention programme incorporating curriculum and school connectedness components. *Health Education Research*, *28*(4), 612–625. https://doi.org/10.1093/her/cyt048

Chaux, E., Velásquez, A. M., Schultze-Krumbholz, A., & Scheithauer, H. (2016). Effects of the cyberbullying prevention program media heroes (*Medienhelden*) on traditional bullying: Effects of Media Heroes on Traditional Bullying. *Aggressive Behavior*, *42*(2), 157–165. https://doi.org/10.1002/ab.21637

Cheng, T. L., Haynie, D., Brenner, R., Wright, J. L., Chung, S. -e., & Simons-Morton, B. (2008). Effectiveness of a Mentor-Implemented, Violence Prevention Intervention for Assault-Injured Youths Presenting to the Emergency Department: Results of a Randomized Trial. *PEDIATRICS*, *122*(5), 938–946. https://doi.org/10.1542/peds.2007-2096

Coleman, M., Pfeiffer, S., & Oakland, T. (1992). Aggression Replacement Training with Behaviorally Disordered Adolescents. *Behavioral Disorders*, *18*(1), 54–66.

Crooks, C. V., Scott, K., Ellis, W., & Wolfe, D. A. (2011). Impact of a universal school-based violence prevention program on violent delinquency: Distinctive benefits for youth with maltreatment histories. *Child Abuse & Neglect*, *35*(6), 393–400. https://doi.org/10.1016/j.chiabu.2011.03.002

Cunningham, R. M., Chermack, S. T., Zimmerman, M. A., Shope, J. T., Bingham, C. R., Blow, F. C., & Walton, M. A. (2012). Brief Motivational Interviewing Intervention for Peer Violence and Alcohol Use in Teens: One-Year Follow-up. *PEDIATRICS*, *129*(6), 1083–1090. https://doi.org/10.1542/peds.2011-3419

Densley, J. A., Adler, J. R., Zhu, L., & Lambine, M. (2017). Growing against gangs and violence: Findings from a process and outcome evaluation. *Psychology of Violence*, *7*(2), 242–252. https://doi.org/10.1037/vio0000054

DeSmet, A., Bastiaensens, S., Van Cleemput, K., Poels, K., Vandebosch, H., Deboutte, G., … De Bourdeaudhuij, I. (2018). The efficacy of the Friendly Attac serious digital game to promote prosocial bystander behavior in cyberbullying among young adolescents: A cluster-randomized controlled trial. *Computers in Human Behavior*, *78*, 336–347. https://doi.org/10.1016/j.chb.2017.10.011

Domino, M. (2013). Measuring the Impact of an Alternative Approach to School Bullying. *Journal of School Health*, *83*(6), 430–437. https://doi.org/10.1111/josh.12047

Eron, L., Huesmann, R., Spindler, A., Guerra, N., Henry, D., & Tolan, P. (2002). A cognitive-ecological approach to preventing aggression in urban settings: Initial outcomes for high-risk children. *Journal of Consulting and Clinical Psychology*, *70*(1), 179–194. https://doi.org/10.1037/0022-006X.70.1.179

Espelage, D. L., Low, S., Polanin, J. R., & Brown, E. C. (2013). The Impact of a Middle School Program to Reduce Aggression, Victimization, and Sexual Violence. *Journal of Adolescent Health*, *53*(2), 180–186. https://doi.org/10.1016/j.jadohealth.2013.02.021

Etscheidt, S. L. (1984). *A comparison of cognitive, cognitive-behavioral and behavioral interventions in reducing classroom aggressive behavior* (University of Minnesota). Retrieved from

https://www.researchgate.net/publication/36324133_A_comparison_of_cognitive_cognitive-behavioral_and_behavioral_interventions_in_reducing_classroom_aggressive_behavior

Farrell, A. D., Meyer, A. L., Sullivan, T. N., & Kung, E. M. (2003). Evaluation of the Responding in Peaceful and Positive Ways (RIPP) Seventh Grade Violence Prevention Curriculum. *Journal of Child and Family Studies*, *12*(1), 101–120.

Farrell, A. D., Meyer, A. L., & White, K. S. (2001). Evaluation of Responding in Peaceful and Positive Ways (RIPP): A School-Based Prevention Program for Reducing Violence Among Urban Adolescents. *Journal of Clinical Child & Adolescent Psychology*, *30*(4), 451–463. https://doi.org/10.1207/S15374424JCCP3004_02

Farrell, A. D., Valois, R. F., & Meyer, A. L. (2002). Evaluation of the RIPP-6 Violence Prevention Program at a Rural Middle School. *American Journal of Health Education*, *33*(3), 167–172. https://doi.org/10.1080/19325037.2002.10604733

Feindler, E. L., Ecton, R. B., Kingsley, D., & Dubey, D. R. (1986). Group anger-control training for institutionalized psychiatric male adolescents. *Behavior Therapy*, *17*(2), 109–123. https://doi.org/10.1016/S0005-7894(86)80079-X

Fekkes, M. (2005). *Bullying among elementary school children*. Universiteit Leiden, Leiden.

Flewelling, R. L., Paschal, M. J., Lissy, K., Burrus, B., Ringwalt, C. L., Graham, P., … Browne, D. C. (1999). *A Process and Outcome Evaluation of Supporting Adolescents with Guidance and Employment (SAGE): A Community-Based Violence Prevention Program for African American Male Adolescents.pdf* (No. U81/CCU408504-01).

Foshee, V. A., Reyes, L. M., Agnew-Brune, C. B., Simon, T. R., Vagi, K. J., Lee, R. D., & Suchindran, C. (2014). The Effects of the Evidence-Based Safe Dates Dating Abuse Prevention Program on Other Youth Violence Outcomes. *Prevention Science*, *15*(6), 907–916. https://doi.org/10.1007/s11121-014-0472-4

Franco, C., Amutio, A., López-González, L., Oriol, X., & Martínez-Taboada, C. (2016). Effect of a Mindfulness Training Program on the Impulsivity and Aggression Levels of Adolescents with Behavioral Problems in the Classroom. *Frontiers in Psychology*, *7*(1385). https://doi.org/10.3389/fpsyg.2016.01385

Friedman, A. S., Terras, A., & Glassman, K. (2002). Multimodel Substance Use Intervention Program for Male Delinquents. *Journal of Child & Adolescent Substance Abuse*, *11*(4), 43–65. https://doi.org/10.1300/J029v11n04_03

Garaigordobil, M., & Martínez-Valderrey, V. (2015). Effects of Cyberprogram 2.0 on “face-to-face” bullying, cyberbullying, and empathy. *Psicothema*, (27.1), 45–51. https://doi.org/10.7334/psicothema2014.78

Gilberg, J. A. (1982). *The Effect of cognitive Role-Taking on the Classroom Behavior of Aggressive Boys*. Texas A&M University, Ann Arbor.

Goldbeck, L., & Schmid, K. (2003). Effectiveness of Autogenic Relaxation Training on Children and Adolescents With Behavioral and Emotional Problems. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*(9), 1046–1054. https://doi.org/10.1097/01.CHI.0000070244.24125.F

Goldstein, Naomi E. S., Giallella, C. L., Haney-Caron, E., Peterson, L., Serico, J., Kemp, K., … Lochman, J. (2018). Juvenile Justice Anger Management (JJAM) Treatment for Girls: Results of a randomized controlled trial. *Psychological Services*, *15*(4), 386–397. https://doi.org/10.1037/ser0000184

Goldstein, Naomi E. Sevin, Dovidio, A., Kalbeitzer, R., Weil, J., & Strachan, M. (2007). Anger Management for Female Juvenile Offenders: Results of a Pilot Study. *Journal of Forensic Psychology Practice*, *7*(2), 1–28. https://doi.org/10.1300/J158v07n02_01

Gottfredson, D. C., Cross, A. B., Wilson, D. M., Connell, N., & Rorie, M. (2010). *A Randomized Trial of the Effects of an Enhanced After-School Program for Middle-School Students* (No. R305F050069). U.S. Department of Education Institute of Educational Sciences.

Gottfredson, D. C., Cross, A., Wilson, D., Rorie, M., & Connell, N. (2010). An Experimental Evaluation of the All Stars Prevention Curriculum in a Community After School Setting. *Prevention Science*, *11*(2), 142–154. https://doi.org/10.1007/s11121-009-0156-7

Griffin Jr., J. P., Holliday, R. C., Frazier, E., & Braithwaite, R. L. (2009). The BRAVE (Building Resiliency and Vocational Excellence) Program: Evaluation Findings for a Career-Oriented Substance Abuse and Violence Preventive Intervention. *Journal of Health Care for the Poor and Underserved*, *20*(3), 798–816. https://doi.org/10.1353/hpu.0.0174

Guerra, N. G., & Slaby, R. G. (1990). Cognitive Mediators of Aggression in Adolescent Offenders: 2. Intervention. *Developmental Psychology*, *26*(2), 269–277.

Gusmões, J. D. S. P., Sañudo, A., Valente, J. Y., & Sanchez, Z. M. (2018). Violence in Brazilian schools: Analysis of the effect of the #Tamojunto prevention program for bullying and physical violence. *Journal of Adolescence*, *63*, 107–117. https://doi.org/10.1016/j.adolescence.2017.12.003

Hanewinkel, R., Isensee, B., Maruska, K., Sargent, J. D., & Morgenstern, M. (2010). Denormalising smoking in the classroom: Does it cause bullying? *Journal of Epidemiology & Community Health*, *64*(3), 202–208. https://doi.org/10.1136/jech.2009.089185

Harrington, N. G., Giles, S. M., Hoyle, R. H., Feeney, G. J., & Yungbluth, S. C. (2001). Evaluation of the All Stars Character Education and Problem Behavior Prevention Program: Effects on Mediator and Outcome Variables for Middle School Students. *Health Education & Behavior*, *28*(5), 533–546. https://doi.org/10.1177/109019810102800502

Hecht, M. L., Elek, E., Wagstaff, D. A., Kam, J. A., Marsiglia, F., Dustman, P., … Harthun, M. (2008). Immediate and Short-Term Effects of the 5th Grade Version of the *Keepin'' it Real</i> Substance Use Prevention Intervention*. *Journal of Drug Education*, *38*(3), 225–251. https://doi.org/10.2190/DE.38.3.c

Herrmann, D. S., & McWhirter, J. J. (2003). Anger & Aggression Management In Young Adolescents: An Experimental Validation of the SCARE Program. *Education and Treatment of Children*, *26*(3), 273–302.

Hudley, C., & Graham, S. (1993). An Attributional Intervention to Reduce Peer-Directed Aggression among African-American Boys. *Child Development*, *64*(1), 124. https://doi.org/10.2307/1131441

Huey, W. C. (1984). Effects of Counselor and Peer-Led Group Assertive Training on Black Adolescent Aggression. *Journal of Counseling Psychology*, *31*(1), 95–98.

Johnston, B. D., Rivara, F. P., Droesch, R. M., Dunn, C., & Copass, M. K. (2002). Behavior Change Counseling in the Emergency Department to Reduce Injury Risk: A Randomized, Controlled Trial. *Pediatrics*, *110*(2), 267–274. https://doi.org/10.1542/peds.110.2.267

Jones, Y. (1991). Aggression replacement training in a high school setting. *Journal of Psychologists and Counsellors in Schools*, *1*(1), 81–99. https://doi.org/10.1017/S1037291100002405

Jordans, M. J. D., Komproe, I. H., Tol, W. A., Kohrt, B. A., Luitel, N. P., Macy, R. D., & De Jong, J. T. V. M. (2010). Evaluation of a classroom-based psychosocial intervention in conflict-affected Nepal: A cluster randomized controlled trial: Evaluation of a psychosocial intervention in Nepal. *Journal of Child Psychology and Psychiatry*, *51*(7), 818–826. https://doi.org/10.1111/j.1469-7610.2010.02209.x

Karataş, Z. (2011). Investigating the Effects of Group Practice Performed Using Psychodrama Techniques on Adolescents' Conflict Resolution Skills. *Educational Sciences: Theory & Practice*, *11*(2), 609–614.

Karataş, Z., & Gökçakan, Z. (2009). A Comparative Investigation of the Effects of Cognitive-Behavioral Group Practices and Psychodrama on Adolescent Aggression. *Educational Sciences Theory & Practice*, *9*(3), 1441–1452.

Kärnä, A., Voeten, M., Little, T. D., Alanen, E., Poskiparta, E., & Salmivalli, C. (2013). Effectiveness of the KiVa Antibullying Program: Grades 1–3 and 7–9. *Journal of Educational Psychology*, *105*(2), 535–551. https://doi.org/10.1037/a0030417

Kazdin, A. E., Esveldt-Dawson, K., French, N. H., & Unis, A. S. (1987). Problem-Solving Skills Training and Relationship Therapy in the Treatment of Antisocial Child Behavior. *Journal of Consulting and Clinical Psychology*, *55*(1), 76–85.

Kliewer, W., Lepore, S. J., Farrell, A. D., Allison, K. W., Meyer, A. L., Sullivan, T. N., & Greene, A. Y. (2011). A School-Based Expressive Writing Intervention for At-Risk Urban Adolescents' Aggressive Behavior and Emotional Lability. *Journal of Clinical Child & Adolescent Psychology*, *40*(5), 693–705. https://doi.org/10.1080/15374416.2011.597092

Komro, K. A., Perry, C. L., Veblen-Mortenson, S., Stigler, M. H., Bosma, L. M., Munson, K. A., & Farbakhsh, K. (2004). Violence-Related Outcomes of the D.A.R.E. Plus Project. *Health Education & Behavior*, *31*(3), 335–354. https://doi.org/10.1177/1090198104263337

Kozina, A. (2018). Can the "My FRIENDS" Anxiety Prevention Programme Also be Used to Prevent Aggression? A Six-Month Follow-Up in a School. *School Mental Health*, *10*(4), 500–509. https://doi.org/10.1007/s12310-018-9272-5

Krahé, B., & Busching, R. (2015). Breaking the vicious cycle of media violence use and aggression: A test of intervention effects over 30 months. *Psychology of Violence*, *5*(2), 217–226. https://doi.org/10.1037/a0036627

Lee, D. Y., Hallberg, E. T., & Hassard, H. (1979). Effects of Assertion Training on Aggressive Behavior of Adolescents. *Journal of Counseling Psychology*, *26*(5), 459–461.

Li, S., & Chen, Z. (2017). Effects of Neurofeedback Training on Dyslexic Students' Aggression: An Experimental Study. *NeuroQuantology*, *15*(2). https://doi.org/10.14704/nq.2017.15.2.1072

Lindstrom Johnson, S., Jones, V., & Cheng, T. L. (2015). Promoting "Healthy Futures" to Reduce Risk Behaviors in Urban Youth: A Randomized Controlled Trial. *American Journal of Community Psychology*, *56*(1–2), 36–45. https://doi.org/10.1007/s10464-015-9734-y

Lochman, J. E., Burch, P. R., Curry, J. F., & Lampron, L. B. (1984). Treatment and generalization effects of cognitive–behavioral and goal-setting interventions with aggressive boys. *Journal of Consulting and Clinical Psychology*, *52*(5), 915–916. https://doi.org/10.1037/0022-006X.52.5.915

Lochman, J. E., Lampron, L. B., Burch, P. R., & Curry, J. F. (1985). Client characteristics associated with behavior change for treated and untreated aggressive boys. *Journal of Abnormal Child Psychology*, *13*(4), 527–538. https://doi.org/10.1007/BF00923139

Möller, I., Krahé, B., Busching, R., & Krause, C. (2012). Efficacy of an Intervention to Reduce the Use of Media Violence and Aggression: An Experimental Evaluation with Adolescents in Germany. *Journal of Youth and Adolescence*, *41*(2), 105–120. https://doi.org/10.1007/s10964-011-9654-6

Moody, T. J. (1981). *The Effects of Group Assertion Training on Aggressive Behaviors of Seventh and Eight Grade Males*. Oklahoma State University, Ann Arbor.

Moore, K. J., & Shannon, K. K. (1993). Brief report: The development of superstitious beliefs in the effectiveness of treatment of anger: Evidence for the importance of experimental program evaluation in applied settings. *Behavioral Interventions*, *8*(2), 147–161. https://doi.org/10.1002/bin.2360080207

Multisite Violence Prevention Project. (2014). Targeting High-Risk, Socially Influential Middle School Students to Reduce Aggression: Universal Versus Selective Preventive Intervention Effects. *Journal of Research on Adolescence*, *24*(2), 364–382. https://doi.org/10.1111/jora.12067

Newton, F. R. (1994). *A Study Of The Effectiveness Of Using Collegiate Mentors To Reduce Violent Behavior, Improve Self-Concept, And Increase Academic Success In An Urban Middle School* (The College of William and Mary). Retrieved from http://scholarworks.wm.edu/etd/1539618344

Nieri, T., Apkarian, J., Kulis, S., & Marsiglia, F. F. (2015). Effects of a Youth Substance Use Prevention Program on Stealing, Fighting, and Weapon Use. *The Journal of Primary Prevention*, *36*(1), 41–49. https://doi.org/10.1007/s10935-014-0373-0

Nocentini, A., & Menesini, E. (2016). KiVa Anti-Bullying Program in Italy: Evidence of Effectiveness in a Randomized Control Trial. *Prevention Science*, *17*(8), 1012–1023. https://doi.org/10.1007/s11121-016-0690-z

Parker, A. E., & Kupersmidt, J. B. (2016). Two Universal Mindfulness Education Programs for Elementary and Middle-School Students: Master Mind and Moment. In K. Schonert-Reichl (Ed.), *Handbook of mindfulness in education: Integrating theory and research into practice* (pp. 335–354). New York: Springer.

Parker, A. E., Kupersmidt, J. B., Mathis, E. T., Scull, T. M., & Sims, C. (2014). The impact of mindfulness education on elementary school students: Evaluation of the *Master Mind* program. *Advances in School Mental Health Promotion*, *7*(3), 184–204. https://doi.org/10.1080/1754730X.2014.916497

Perry, C. L., Komro, K. A., Veblen-Mortenson, S., Bosma, L. M., Farbakhsh, K., Munson, K. A., … Lytle, L. A. (2003). A Randomized Controlled Trial of the Middle and Junior High School D.A.R.E. and D.A.R.E. Plus Programs. *Archives of Pediatrics & Adolescent Medicine*, *157*(2), 178. https://doi.org/10.1001/archpedi.157.2.178

Petit, J. A. (1998). *The effects of an anger management program on aggressive adolescents_a cognitive-behavioral approach*. University of New Orleans, Ann Arbor.

Puskar, K. R., Ren, D., & McFadden, T. (2015). Testing the 'Teaching Kids to Cope with Anger' Youth Anger Intervention Program in a Rural School-based Sample. *Issues in Mental Health Nursing*, *36*(3), 200–208. https://doi.org/10.3109/01612840.2014.969390

Ringwalt, C. L., Graham, L. A., Paschal, M. J., Flewelling, R. L., & Browne, D. C. (1996). Supporting Adolescents with Guidance and Employment (SAGE). *American Journal of Preventive Medicine*, *12*(5, Supplement), 31–38. https://doi.org/10.1016/S0749-3797(18)30234-4

Şahin, M. (2012). An investigation into the efficiency of empathy training program on preventing bullying in primary schools. *Children and Youth Services Review*, *34*(7), 1325–1330. https://doi.org/10.1016/j.childyouth.2012.03.013

Shechtman, Z. (2000). An innovative intervention for treatment of child and adolescent aggression: An outcome study. *Psychology in the Schools*, *37*(2), 157–167.

Shechtman, Z., & Ifargan, M. (2009). School-based integrated and segregated interventions to reduce aggression. *Aggressive Behavior*, *35*(4), 342–356. https://doi.org/10.1002/ab.20311

Shetgiri, R., Kataoka, S., Lin, H., & Flores, G. (2011). A Randomized, Controlled Trial of a School-Based Intervention to Reduce Violence and Substance Use in Predominantly Latino High School Students. *Journal of the National Medical Association*, *103*(9–10), 932–940. https://doi.org/10.1016/S0027-9684(15)30450-8

Shinde, S., Weiss, H. A., Varghese, B., Khandeparkar, P., Pereira, B., Sharma, A., … Patel, V. (2018). Promoting school climate and health outcomes with the SEHER multi-component secondary school intervention in Bihar, India: A cluster-randomised controlled trial. *The Lancet*, *392*(10163), 2465–2477. https://doi.org/10.1016/S0140-6736(18)31615-5

Shlafer, R. J., McMorris, B. J., Sieving, R. E., & Gower, A. L. (2013). The Impact of Family and Peer Protective Factors on Girls' Violence Perpetration and Victimization. *Journal of Adolescent Health*, *52*(3), 365–371. https://doi.org/10.1016/j.jadohealth.2012.07.015

Sieving, R. E., McMorris, B. J., Beckman, K. J., Pettingell, S. L., Secor-Turner, M., Kugler, K., … Bearinger, L. H. (2011). Prime Time: 12-Month Sexual Health Outcomes of a Clinic-based Intervention to Prevent Pregnancy Risk Behaviors. *Journal of Adolescent Health*, *49*(2), 172–179. https://doi.org/10.1016/j.jadohealth.2010.12.002

Silvia, S., Blitstein, J., Williams, J., Ringwalt, C. L., Dusenbury, L., & Hansen, W. (2010). *Impacts of a Violence Prevention Program for Middle Schools: Findings From the First Year of Implementation* (No. NCEE 2010-4007; p. 159). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Silvia, S., Blitstein, J., Williams, J., Ringwalt, C. L., Dusenbury, L., & Hansen, W. (2011). *Impacts of a Violence Prevention Program for Middle Schools: Findings After 3 Years of Implementation* (No. NCEE 2011-4017; p. 217). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Simon, T. R., Sussman, S., Dahlberg, L. L., & Dent, C. W. (2002). Influence of a Substance-abuse-prevention Curriculum on Violence-related Behavior. *American Journal of Health Behavior*, *26*(2), 103–110. https://doi.org/10.5993/AJHB.26.2.3

Sussman, S., Dent, C. W., Galaif, E. R., Stacy, A. W., Newman, T., Moss, M. A., … Simon, T. R. (1997). Implementation and Process Evaluation of a Student 'School-as-Community' Group: A Component of a School-Based Drug Abuse Prevention Program. *Evaluation Review*, *21*(1), 94–123. https://doi.org/10.1177/0193841X9702100106

Sussman, S., Dent, C. W., & Stacy, A. W. (2002). Project Towards No Drug Abuse: A Review of the Findings and Future Directions. *American Journal of Health Behavior*, *26*(5), 354–365. https://doi.org/10.5993/AJHB.26.5.4

Sussman, S., Dent, C. W., Stacy, A. W., & Craig, S. (1998). One-Year Outcomes of Project Towards No Drug Abuse. *Preventive Medicine*, *27*, 632–642.

Singh, P. (2017). Altering the way adolescents attribute negative ambiguous social encounters: A social-cognitive intervention for reducing aggression. *Asia Pacific Journal of Counselling and Psychotherapy*, *8*(1), 15–28. https://doi.org/10.1080/21507686.2016.1256903

Stallard, P, Phillips, R., Montgomery, A., Spears, M., Anderson, R., Taylor, J., … Sayal, K. (2013). A cluster randomised controlled trial to determine the clinical effectiveness and cost-effectiveness of classroom-based cognitive–behavioural therapy (CBT) in reducing symptoms of depression in high-risk adolescents. *Health Technology Assessment*, *17*(47). https://doi.org/10.3310/hta17470

Stallard, Paul, Montgomery, A. A., Araya, R., Anderson, R., Lewis, G., Sayal, K., … Taylor, J. A. (2010). Protocol for a randomised controlled trial of a school based cognitive behaviour therapy (CBT) intervention to prevent depression in high risk adolescents (PROMISE). *Trials*, *11*(114). https://doi.org/10.1186/1745-6215-11-114

Stevens, V., Bourdeaudhuij, I. D., & Oost, P. V. (2000). Bullying in Flemish schools: An evaluation of anti-bullying intervention in primary and secondary schools. *British Journal of Educational Psychology*, *70*(2), 195–210. https://doi.org/10.1348/000709900158056

Stoltz, S., van Londen, M., Deković, M., de Castro, B. O., Prinzie, P., & Lochman, J. E. (2013). Effectiveness of an Individual School-based Intervention for Children with Aggressive Behaviour: A Randomized Controlled Trial. *Behavioural and Cognitive Psychotherapy*, *41*(5), 525–548. https://doi.org/10.1017/S1352465812000525

Swaim, R. C., & Kelly, K. (2008). Efficacy of a Randomized Trial of a Community and School-based Anti-violence Media Intervention Among Small-town Middle School Youth. *Prevention Science*, *9*(3), 202–214. https://doi.org/10.1007/s11121-008-0096-7

Uzunoglu, G., & Baysan Arabaci, L. (2017). The effect of psychoeducation on the anger management of adolescents diagnosed with conduct disorder. *Dusunen Adam: The Journal of Psychiatry and Neurological Sciences*, *30*, 344–353. https://doi.org/10.5350/DAJPN2017300409

Van Manen, T. G., Prins, P. J. M., & Emmelkamp, P. M. G. (2004). Reducing Aggressive Behavior in Boys With a Social Cognitive Group Treatment: Results of a Randomized, Controlled Trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, *43*(12), 1478–1487. https://doi.org/10.1097/01.chi.0000142669.36815.3e

Wade, L., Smith, J. J., Duncan, M. J., & Lubans, D. R. (2018). Mediators of aggression in a school-based physical activity intervention for low-income adolescent boys. *Mental Health and Physical Activity*, *14*, 39–46. https://doi.org/10.1016/j.mhpa.2017.12.006

Walton, M. A., Chermack, S. T., Shope, J. T., Bingham, C. R., Zimmerman, M. A., Blow, F. C., & Cunningham, R. M. (2010). Effects of a Brief Intervention for Reducing Violence and Alcohol Misuse Among Adolescents: A Randomized Controlled Trial. *JAMA*, *304*(5), 527. https://doi.org/10.1001/jama.2010.1066

Wagner, E. F., Hospital, M. M., Graziano, J. N., Morris, S. L., & Gil, A. G. (2014). A randomized controlled trial of guided self-change with minority adolescents. *Journal of Consulting and Clinical Psychology*, *82*(6), 1128–1139. https://doi.org/10.1037/a0036939

Yorgun, A. (2007). *The Effect of Violence Management Training on Violent Behaviors and Anger Control of Secondary School Students*. Middle East Tehnical University.

Zimmerman, D. (1987). *The efficacy of aggression replacement training with juvenile delinquents* (Syracuse University). Retrieved from https://surface.syr.edu/psy_etd/141

Appendix D

Analyses without outliers

Table C1

Results of moderator analyses for study characteristics based on 265 ESs from 94 studies

Moderator variables	# studies	#ES	ES[a] (95% CI)	Omnibus test	p-value	Variance level 2[b]	Variance level 3[c]
RCT vs CRCT				F (1,263) = 1.08	0.300	0.011	0.076
RCT	43	96	0.35 (0.18, 0.53)***				
CRCT	51	169	0.17 (0.09, 0.26)***				
Publication year	94	265	0.001 (-0.01, 0.01)	F(1,263) = 0.12	0.733	0.011	0.077
Follow-up (in months)	94	265	-0.003 (-0.01, 0.001)	F(1,263) = 1.92	0.167	0.011	0.072
Outcome				F(4,235) = 1.72	0.147	0.012	0.080
General aggression	57	68	0.29 (0.18, 0.39)***				
Physical aggression	59	96	0.16 (0.07, 0.24)***				
Bullying	14	43	0.18 (0.07, 0.28)**				
Weapon carrying	9	22	0.13 (0.01, 0.25)*				
Fighting	7	11	0.20 (0.05, 0.35)*				
Reactive aggression	4	8	--				
Proactive aggression	4	8	--				
Anger-out	3	5	--				
Threatening	2	4	--				
Informant of outcome				F(2,241) = 2.01	0.137	0.012	0.069
Self-report	73	207	0.19 (0.12, 0.26)***				
Teacher report	16	29	0.34 (0.19, 0.50)***				
Observation	7	8	0.27 (-0.14, 0.67)				
Parent report	4	9	--				
Peer report	4	7	--				
Official records	3	3	--				
Continent				F(2,225) = 8.97	<.001***	0.003	0.054
North America	53	135	0.11 (0.03, 0.19)**				
Europe	23	62	0.19 (0.08, 0.30)***				

Middle East	8	31	0.64 (0.41, 0.87)***
Latin America	1	20	--
Africa	1	2	--
East Asia	4	10	--
Oceania	4	5	--

Note. # studies = number of independent studies; # ES = number of effect sizes; d = mean effect size; CI = confidence interval, RCT = Randomised controlled trial, CRCT = Cluster randomised controlled trial, SES = Socioeconomic status, -- = not included in analysis due to lack of data

[a] For categorical predictors, ES is Cohen's d for each category. For continuous predictors, ES is β for that specific predictor.

[b] Variance between the effect sizes from the same study.

[c] Variance between studies.

*p < 0.05; **p < 0.01; ***p < 0.001.

Table C2

Results of moderator analysis for intervention characteristics based on 265 ESs from 112 intervention groups

Moderator variables	#IG	#ES	d[a] (95% CI)	Omnibus test	p-value	Variance level 2[b]	Variance level 3[c]
Methodological characteristics							
Target				F (1,263) = 4.71	0.031*	0.011	0.074
Universal	52	141	0.14 (0.06, 0.23) **				
Targeted	60	124	0.28 (0.18, 0.37) ***				
Setting				F(4,243) = 1.91	0.109	0.011	0.065
Mainstream school	80	199	0.20 (0.13, 0.27)***				
Alternative school	5	12	0.14 (-0.17, 0.45)				
Psychiatric institution	8	13	0.02 (-0.27, 0.30)				
Juvenile correctional	6	11	0.58 (0.25, 0.91)***				
Hospital	6	13	0.09 (-0.17, 0.35)				
Community	2	4	--				
Home	2	8	--				
Facilitator				F(3,226) = 8.91	< .001***	0.007	0.072
Research team	12	29	0.11 (-0.10, 0.32)				
Professional	40	110	0.29 (0.20, 0.38)***				
Teacher	28	74	0.02 (-0.08, 0.12)				
University student	7	16	0.25 (0.01, 0.49)*				
Police officer	2	6	--				
Adult volunteer	3	8	--				
Peer	1	1	--				
Computer-based	2	3	--				
Training				F(3,258) = 4.38	0.005**	0.011	0.069
No training	19	32	0.48 (0.28, 0.68)***				
Only manual	15	26	0.27 (0.11, 0.44)**				
Specific training	29	65	0.21 (0.09, 0.34)***				
Training + supervision	47	139	0.11 (0.01, 0.20)*				
Sample characteristics							
Age (mean)	89	259	-0.01 (-0.03, 0.02)	F(1,257) = 0.17	0.684	0.011	0.074
Gender (proportion male)	87	250	-0.02 (-0.09, 0.05)	F(1,248) = 0.42	0.517	0.011	0.069

Ethnic minority (proportion)	60	172	-0.15 (-0.32, 0.02)	F(1,170) = 3.22	0.074	0.003	0.031
SES (proportion low SES)	22	89	0.09 (-0.08, 0.27)	F(1,87) = 1.13	0.290	0.012	0.002
Intervention characteristics							
Duration (in weeks)	91	263	-0.004 (-0.01, -0.001)*	F(1,261) = 7.09	0.008**	0.011	0.071
Contact hours	80	239	-0.002 (-0.004, -0.00)*	F(1,237) = 4.94	0.027*	0.013	0.088
Intensity (hours per week)	80	239	-0.03 (-0.09, 0.04)	F(1,237) = 0.72	0.398	0.013	0.096
Group vs individual				F(1,253) = 0.72	0.398	0.006	0.082
Group intervention	93	226	0.22 (0.14, 0.30)***				
Individual intervention	15	35	0.14 (-0.05, 0.32)				
Community intervention	2	6	--				
Focus				F(6,243) = 1.10	0.364	0.011	0.062
Peer aggression	46	127	0.20 (0.10, 0.29) ***				
Anger	9	20	0.37 (0.11, 0.63) **				
Socioemotional development	15	23	0.18 (-0.01, 0.36)				
Drug use	10	41	0.03 (-0.17, 0.23)				
Internalising disorders	6	14	0.21 (-0.05, 0.47)				
Problem behaviours	10	18	0.05 (-0.14, 0.25)				
Cyberbullying	5	7	0.28 (-0.01, 0.58)				
Mindfulness	3	4	--				
Dating violence	2	3	--				
Vocational training	2	3	--				

Note. # studies = number of independent studies; # ES = number of effect sizes; d = mean effect size; CI = confidence interval, RCT = Randomised controlled trial, CRCT = Cluster randomised controlled trial, SES = Socioeconomic status, -- = not included in analysis due to lack of data

a For categorical predictors, ES is Cohen's d for each category. For continuous predictors, ES is β for that specific predictor.

b Variance between the effect sizes from the same study.

c Variance between studies.

*p < 0.05; **p < 0.01; ***p < 0.001.

Table C3

Results of BCT analyses for universal interventions based on 139 ESs from 48 intervention groups

BCT No.	BCTs	#IG present	#ES present	ES present (95% CI)	ES absent (95% CI)	t-value	p-value	Difference
1.1	Goal setting (behavior)	6	11	0.09 (-0.07, 0.25)	0.11 (0.05, 0.17)*	0.25	0.803	-0.02
1.2	Problem solving	23	80	0.14 (0.06, 0.23)*	0.08 (-0.00, 0.16)	1.15	0.253	0.06
1.3	Goal setting (outcome)	5	29	0.08 (-0.10, 0.26)	0.11 (0.05, 0.17)*	0.34	0.736	-0.03
1.4	Action planning	5	11	0.13 (-0.08, 0.34)	0.11 (0.05, 0.17)*	0.21	0.832	0.02
1.5	Review behavior goal(s)	1	1	--	--	--	--	--
1.6	Discrepancy between current behavior and goal	1	1	--	--	--	--	--
1.8	Behavioral contract	5	6	0.08 (-0.09, 0.25)	0.11 (0.05, 0.17)*	0.31	0.754	-0.03
1.9	Commitment	6	20	0.01 (-0.13, 0.15)	0.13 (0.07, 0.19)*	1.52	0.130	-0.12
2.1	Monitoring of behavior by others without feedback	2	20	--	--	--	--	--
2.2	Feedback on behavior	5	27	0.04 (-0.12, 0.19)	0.12 (0.06, 0.18)*	0.97	0.332	-0.08
2.3	Self-monitoring of behavior	3	23	--	--	--	--	--
2.7	Feedback on outcome(s) of behavior	3	8	--	--	--	--	--
3.1	Social support (unspecified)	12	24	0.08 (-0.04, 0.19)	0.12 (0.05, 0.18)*	0.64	0.524	-0.04
3.2	Social support (practical)	1	1	--	--	--	--	--
3.3	Social support (emotional)	2	8	--	--	--	--	--
4.1	Instruction on how to perform a behavior	25	83	0.15 (0.07, 0.23)*	0.07 (-0.00, 0.14)	1.60	0.112	0.08
4.2	Information about antecedents	10	56	0.05 (-0.06, 0.16)	0.13 (0.06, 0.19)*	1.22	0.226	-0.08
4.3	Re-attribution	5	13	0.07 (-0.13, 0.27)	0.11 (0.05, 0.17)*	0.39	0.697	-0.04
5.1	Information about health consequences	6	33	0.15 (-0.01, 0.30)	0.10 (0.04, 0.17)*	0.54	0.590	0.05
5.3	Information about social and environmental consequences	28	93	0.13 (0.05, 0.20)*	0.09 (-0.00, 0.17)	0.7	0.469	0.04
5.4	Monitoring of emotional consequences	2	21	--	--	--	--	--

5.6	Information about emotional consequences	3	5	--	--	--	--	--
6.1	Demonstration of the behavior	14	35	0.13 (0.02, 0.25)*	0.10 (0.03, 0.17)*	0.50	0.620	0.03
6.2	Social comparison	9	37	0.10 (-0.04, 0.24)	0.11 (0.05, 0.18)*	0.13	0.895	-0.01
6.3	Information about others' approval	5	15	0.06 (-0.11, 0.24)	0.11 (0.05, 0.18)*	0.57	0.571	-0.05
7.1	Prompts/cues	2	4	--	--	--	--	--
8.1	Behavioral practice/rehearsal	38	117	0.13 (0.07, 0.20)*	0.04 (-0.07, 0.15)	1.48	0.142	0.09
8.2	Behavior substitution	19	82	0.07 (-0.02, 0.16)	0.14 (0.06, 0.21)*	1.16	0.246	-0.07
8.3	Habit formation	2	2	--	--	--	--	--
8.6	Generalisation of target behavior	6	35	0.08 (-0.08, 0.25)	0.11 (0.05, 0.18)*	0.34	0.737	-0.03
9.1	Credible source	6	11	0.06 (-0.17, 0.29)	0.11 (0.05, 0.17)*	0.45	0.654	-0.05
9.2	Pros and cons	3	10	--	--	--	--	--
9.3	Comparative imagining of future outcomes	4	16	--	--	--	--	--
10.3	Non-specific reward	6	19	0.16 (-0.02, 0.33)	0.10 (0.04, 0.17)*	0.57	0.570	0.05
10.4	Social reward	7	20	0.05 (-0.10, 0.20)	0.12 (0.06, 0.18)*	0.80	0.424	-0.06
10.5	Social incentive	1	1	--	--	--	--	--
10.6	Non-specific incentive	4	15	--	--	--	--	--
10.9	Self-reward	1	2	--	--	--	--	--
10.11	Future punishment	6	27	0.01 (-0.15, 0.18)	0.12 (0.06, 0.18)*	1.24	0.219	-0.11
11.2	Reduce negative emotions	19	42	0.16 (0.06, 0.25)*	0.08 (0.01, 0.15)*	1.29	0.199	0.08
12.1	Restructuring the physical environment	1	1	--	--	--	--	--
12.2	Restructuring the social environment	6	13	0.07 (-0.06, 0.20)	0.11 (0.05, 0.17)*	0.64	0.523	-0.04
12.3	Avoidance/reducing exposure to cues of behavior	7	33	0.06 (-0.08, 0.20)	0.12 (0.05, 0.18)*	0.72	0.474	-0.06
12.5	Adding objects to the environment	4	7	--	--	--	--	--
13.1	Identification of self as role model	7	36	0.10 (-0.06, 0.25)	0.11 (0.05, 0.17)*	0.18	0.854	-0.02
13.2	Framing/reframing	22	65	0.11 (0.03, 0.20)*	0.11 (0.03, 0.19)*	0.10	0.920	0.01

13.3	Incompatible belief	2	4	--	--	--	--	--
13.4	Valued self-identity	4	24	--	--	--	--	--
14.2	Punishment	4	19	--	--	--	--	--
14.8	Reward alternative behavior	1	9	--	--	--	--	--
15.1	Verbal persuasion about capability	1	2	--	--	--	--	--
15.2	Mental rehearsal of successful performance	4	23	--	--	--	--	--
15.4	Self-talk	6	19	0.15 (-0.02, 0.31)	0.10 (0.04, 0.17)*	0.47	0.641	0.04

Note. BCT = Behaviour Change Technique; # IG = number of intervention groups; # ES = number of effect sizes; CI = confidence interval; -- = not included in analysis due to lack of data; meta-regression with number of BCTs: $F(1,137) = 0.07$, $p = .789$; meta-regression including all the BCTs that are reported in 5 IG or more: $F(29,109) = 0.95$, $p = .547$.

*p < 0.05

Table C4

Results of BCT analyses for targeted interventions based on 127 ESs from 63 intervention groups

BCT No.	BCTs	#IG present	#ES present	ES present (95% CI)	ES absent (95% CI)	t-value	p-value	Difference
1.1	Goal setting (behavior)	8	24	0.46 (0.09, 0.83)*	0.29 (0.11, 0.47)*	0.83	0.409	0.17
1.2	Problem solving	31	64	0.34 (0.14, 0.54)*	0.30 (0.09, 0.51)*	0.32	0.749	0.04
1.3	Goal setting (outcome)	15	43	0.16 (-0.13, 0.45)	0.39 (0.20, 0.59)*	1.36	0.176	-0.23
1.4	Action planning	8	11	0.67 (0.21, 1.14)*	0.27 (0.10, 0.45)*	1.59	0.114	0.40
1.5	Review behavior goal(s)	2	3	--	--	--	--	--
1.6	Discrepancy between current behavior and goal	2	5	--	--	--	--	--
1.7	Review outcome goal(s)	3	8	--	--	--	--	--
1.8	Behavioral contract	2	11	--	--	--	--	--
1.9	Commitment	5	14	0.07 (-0.45, 0.60)	0.35 (0.18, 0.52)*	0.92	0.327	-0.27
2.1	Monitoring of behavior by others without feedback	2	3	--	--	--	--	--
2.2	Feedback on behavior	20	36	0.27 (-0.01, 0.64)	0.35 (0.15, 0.54)*	0.48	0.631	-0.08
2.3	Self-monitoring of behavior	15	35	0.22 (-0.08, 0.52)	0.36 (0.17, 0.55)*	0.80	0.427	-0.14
2.4	Self-monitoring of outcome(s) of behavior	4	5	--	--	--	--	--
2.5	Monitoring outcome(s) of behavior by others without feedback	2	2	--	--	--	--	--
2.7	Feedback on outcome(s) of behavior	7	10	0.68 (0.26, 1.10)*	0.28 (0.11, 0.45)*	1.83	0.069	0.41
3.1	Social support (unspecified)	11	24	0.30 (0.07, 0.52)*	0.33 (0.16, 0.50)*	0.32	0.746	-0.03
3.2	Social support (practical)	4	10	--	--	--	--	--
3.3	Social support (emotional)	3	6	--	--	--	--	--
4.1	Instruction on how to perform a behavior	28	54	0.28 (0.08, 0.49)*	0.36 (0.15, 0.57)*	0.60	0.547	-0.08
4.2	Information about antecedents	26	60	0.41 (0.20, 0.62)*	0.25 (0.05, 0.45)*	1.28	0.204	0.16
4.3	Re-attribution	12	29	0.47 (0.15, 0.79)*	0.27 (0.09, 0.46)*	1.06	0.290	0.20

5.1	Information about health consequences	3	6	--	--	--	--	--
5.2	Salience of consequences	2	2	--	--	--	--	--
5.3	Information about social and environmental consequences	27	54	0.28 (0.08, 0.48)*	0.36 (0.16, 0.55)*	0.64	0.521	-0.07
5.4	Monitoring of emotional consequences	3	6	--	--	--	--	--
5.5	Anticipated regret	1	2	--	--	--	--	--
5.6	Information about emotional consequences	4	13	--	--	--	--	--
6.1	Demonstration of the behavior	17	27	0.35 (0.06, 0.65)*	0.31 (0.13, 0.49)*	0.25	0.806	0.04
6.2	Social comparison	16	30	0.15 (-0.16, 0.45)	0.38 (0.20, 0.56)*	1.29	0.199	-0.23
6.3	Information about others' approval	5	9	0.08 (-0.40, 0.57)	0.35 (0.18, 0.53)*	1.04	0.301	-0.27
7.1	Prompts/cues	2	4	--	--	--	--	--
8.1	Behavioral practice/rehearsal	46	88	0.35 (0.17, 0.52)*	0.25 (-0.02, 0.51)	0.72	0.473	0.10
8.2	Behavior substitution	25	55	0.24 (0.01, 0.46)*	0.38 (0.19, 0.58)*	1.13	0.260	-0.15
8.3	Habit formation	2	2	--	--	--	--	--
8.4	Habit reversal	3	4	--	--	--	--	--
8.6	Generalisation of target behavior	16	35	0.35 (0.06, 0.64)*	0.31 (0.13, 0.50)*	0.24	0.812	0.04
8.7	Graded tasks	3	4	--	--	--	--	--
9.1	Credible source	3	4	--	--	--	--	--
9.2	Pros and cons	7	19	0.42 (0.01, 0.82)*	0.31 (0.13, 0.48)*	0.49	0.626	0.11
9.3	Comparative imagining of future outcomes	2	4	--	--	--	--	--
10.1	Material incentive (behavior)	4	11	--	--	--	--	--
10.2	Material reward (behavior)	16	28	0.21 (-0.09, 0.52)	0.36 (0.17, 0.54)*	0.82	0.413	-0.14
10.3	Non-specific reward	9	12	-0.04 (-0.45, 0.38)	0.37 (0.21, 0.54)*	1.84	0.068	-0.41
10.4	Social reward	9	22	0.41 (0.12, 0.71)*	0.31 (0.13, 0.48)*	0.73	0.468	0.11
10.5	Social incentive	2	4	--	--	--	--	--
10.6	Non-specific incentive	3	8	--	--	--	--	--

10.9	Self-reward	6	8	0.36 (-0.09, 0.81)	0.32 (0.15, 0.49)*	0.18	0.860	0.04
11.2	Reduce negative emotions	16	35	0.43 (0.13, 0.72)*	0.28 (0.08, 0.47)*	0.82	0.413	0.15
12.2	Restructuring the social environment	2	4	--	--	--	--	--
12.3	Avoidance/reducing exposure to cues of behavior	1	4	--	--	--	--	--
12.4	Distraction	2	3	--	--	--	--	--
12.5	Adding objects to the environment	3	4	--	--	--	--	--
13.1	Identification of self as role model	2	2	--	--	--	--	--
13.2	Framing/reframing	19	45	0.33 (0.06, 0.59)*	0.32 (0.13, 0.52)*	0.03	0.979	0.00
13.3	Incompatible belief	1	1	--	--	--	--	--
13.4	Valued self-identity	2	10	--	--	--	--	--
13.5	Identity associated with changed behavior	1	1	--	--	--	--	--
14.1	Behavior cost	2	4	--	--	--	--	--
14.3	Remove reward	1	2	--	--	--	--	--
14.4	Reward approximation	2	3	--	--	--	--	--
15.1	Verbal persuasion about capability	2	6	--	--	--	--	--
15.2	Mental rehearsal of successful performance	4	6	--	--	--	--	--
15.4	Self-talk	16	26	0.38 (0.08, 0.68)*	0.30 (0.12, 0.49)*	0.45	0.654	0.08
16.3	Vicarious consequences	2	8	--	--	--	--	--

Note. BCT = Behaviour Change Technique; # IG = number of intervention groups; # ES = number of effect sizes; CI = confidence interval; -- = not included in analysis due to lack of data; meta-regression with number of BCTs: $F(1,125) = 0.02$, $p = .900$; meta-regression including all the BCTs that are reported in 5 IG or more: $F(27,99) = 0.79$, $p = 0.756$.

*p < 0.05

Appendix E

BCT analyses for universal interventions

Table D1

Results of BCT analyses for universal interventions based on 142 ESs from 52 intervention groups

BCT No.	BCTs	#IG present	#ES present	ES present (95% CI)	ES absent (95% CI)	t-value	p-value	Difference
1.1	Goal setting (behavior)	6	11	0.10 (-0.14, 0.34)	0.12 (0.03, 0.20)*	0.14	0.889	-0.02
1.2	Problem solving	25	82	0.20 (0.08, 0.31)*	0.03 (-0.08, 0.15)	2.03	0.044	0.17*
1.3	Goal setting (outcome)	5	29	0.08 (-0.18, 0.34)	0.12 (0.03, 0.21)*	0.27	0.785	-0.04
1.4	Action planning	6	12	0.25 (-0.04, 0.54)	0.10 (0.02, 0.20)*	0.96	0.341	0.15
1.5	Review behavior goal(s)	1	1	--	--	--	--	--
1.6	Discrepancy between current behavior and goal	1	1	--	--	--	--	--
1.8	Behavioral contract	5	6	0.09 (-0.16, 0.34)	0.12 (0.03, 0.20)*	0.23	0.818	-0.03
1.9	Commitment	6	20	0.01 (-0.20, 0.22)	0.13 (0.04, 0.22)*	1.08	0.281	-0.12
2.1	Monitoring of behavior by others without feedback	2	21	--	--	--	--	--
2.2	Feedback on behavior	5	27	0.04 (-0.19, 0.28)	0.12 (0.04, 0.21)*	0.64	0.523	-0.08
2.3	Self-monitoring of behavior	3	23	--	--	--	--	--
2.7	Feedback on outcome(s) of behavior	3	8	--	--	--	--	--
3.1	Social support (unspecified)	12	25	0.13 (-0.02, 0.29)	0.11 (0.02, 0.20)*	0.26	0.794	0.02
3.2	Social support (practical)	1	1	--	--	--	--	--
3.3	Social support (emotional)	2	8	--	--	--	--	--
4.1	Instruction on how to perform a behavior	25	84	0.17 (0.06, 0.28)*	0.06 (-0.04, 0.16)	1.64	0.104	0.11
4.2	Information about antecedents	10	56	0.06 (-0.10, 0.21)	0.13 (0.04, 0.22)*	0.88	0.378	-0.08
4.3	Re-attribution	5	14	0.19 (-0.09, 0.47)	0.11 (0.02, 0.20)*	0.54	0.591	0.08

5.1	Information about health consequences	6	33	0.15 (-0.08, 0.38)	0.11 (0.02, 0.20)*	0.35	0.725	0.04
5.3	Information about social and environmental consequences	28	94	0.15 (0.05, 0.26)*	0.06 (-0.06, 0.18)	1.40	0.239	0.09
5.4	Monitoring of emotional consequences	2	21	--	--	--	--	--
5.6	Information about emotional consequences	3	5	--	--	--	--	--
6.1	Demonstration of the behavior	14	38	0.14 (-0.02, 0.29)	0.11 (0.01, 0.21)*	0.29	0.772	0.03
6.2	Social comparison	9	37	0.11 (-0.09, 0.31)	0.12 (0.02, 0.21)*	0.05	0.961	-0.01
6.3	Information about others' approval	5	15	0.07 (-0.18, 0.31)	0.12 (0.03, 0.21)*	0.41	0.681	-0.06
7.1	Prompts/cues	2	4	--	--	--	--	--
8.1	Behavioral practice/rehearsal	38	119	0.16 (0.07, 0.25)*	-0.04 (-0.18, 0.11)	2.42	0.017	0.20*
8.2	Behavior substitution	19	83	0.09 (-0.04, 0.22)	0.13 (0.02, 0.24)*	0.44	0.658	-0.04
8.3	Habit formation	3	3	--	--	--	--	--
8.6	Generalisation of target behavior	6	36	0.16 (-0.07, 0.40)	0.11 (0.02, 0.20)*	0.43	0.669	0.05
9.1	Credible source	6	12	0.19 (-0.11, 0.49)	0.11 (0.02, 0.20)*	0.54	0.590	0.08
9.2	Pros and cons	3	10	--	--	--	--	--
9.3	Comparative imagining of future outcomes	4	16	--	--	--	--	--
10.3	Non-specific reward	6	19	0.17 (-0.07, 0.42)	0.11 (0.02, 0.20)*	0.51	0.611	0.07
10.4	Social reward	7	20	0.07 (-0.14, 0.28)	0.12 (0.03, 0.21)*	0.44	0.661	-0.05
10.5	Social incentive	1	1	--	--	--	--	--
10.6	Non-specific incentive	4	15	--	--	--	--	--
10.9	Self-reward	1	2	--	--	--	--	--
10.11	Future punishment	6	27	0.02 (-0.23, 0.26)	0.13 (0.04, 0.22)*	0.85	0.397	-0.11
11.2	Reduce negative emotions	19	43	0.20 (0.06, 0.33)*	0.07 (-0.04, 0.17)	1.52	0.131	0.13
12.1	Restructuring the physical environment	1	1	--	--	--	--	--
12.2	Restructuring the social environment	6	13	0.07 (-0.11, 0.26)	0.12 (0.03, 0.20)*	0.48	0.632	-0.05

12.3	Avoidance/reducing exposure to cues of behavior	7	33	0.06 (-0.14, 0.27)	0.13 (0.03, 0.22)*	0.54	0.593	-0.06
12.5	Adding objects to the environment	4	8	--	--	--	--	--
13.1	Identification of self as role model	7	36	0.10 (-0.12, 0.32)	0.12 (0.03, 0.21)*	0.11	0.914	-0.01
13.2	Framing/reframing	22	65	0.12 (-0.01, 0.24)	0.11 (0.00, 0.22)*	0.07	0.945	0.01
13.3	Incompatible belief	2	4	--	--	--	--	--
13.4	Valued self-identity	4	24	--	--	--	--	--
14.2	Punishment	4	19	--	--	--	--	--
14.8	Reward alternative behavior	1	9	--	--	--	--	--
15.1	Verbal persuasion about capability	1	2	--	--	--	--	--
15.2	Mental rehearsal of successful performance	4	23	--	--	--	--	--
15.4	Self-talk	6	19	0.17 (-0.07, 0.40)	0.11 (0.02, 0.20)*	0.49	0.628	0.06

Note. BCT = Behaviour Change Technique; # IG = number of intervention groups; # ES = number of effect sizes; CI = confidence interval; -- = not included in analysis due to lack of data

*$p < 0.05$

Appendix F

BCT analyses for targeted interventions

Table E1

Results of BCT analyses for targeted interventions based on 132 ESs from 64 intervention groups

BCT No.	BCTs	#IG present	#ES present	ES present (95% CI)	ES absent (95% CI)	t-value	p-value	Difference
1.1	Goal setting (behavior)	9	27	0.65 (0.10, 1.20)*	0.41 (0.14, 0.68)*	0.77	0.441	0.24
1.2	Problem solving	32	67	0.47 (0.20, 0.75)*	0.43 (0.14, 0.73)*	0.26	0.794	0.04
1.3	Goal setting (outcome)	15	43	0.16 (-0.26, 0.59)	0.57 (0.29, 0.85)*	1.63	0.105	-0.40
1.4	Action planning	9	15	1.00 (0.37, 1.63)*	0.37 (0.11, 0.63)*	1.87	0.064	0.63
1.5	Review behavior goal(s)	2	4	--	--	--	--	--
1.6	Discrepancy between current behavior and goal	2	5	--	--	--	--	--
1.7	Review outcome goal(s)	3	8	--	--	--	--	--
1.8	Behavioral contract	3	13	--	--	--	--	--
1.9	Commitment	5	14	0.07 (-0.76, 0.90)	0.49 (0.24, 0.74)*	0.95	0.343	-0.42
2.1	Monitoring of behavior by others without feedback	3	5	--	--	--	--	--
2.2	Feedback on behavior	21	37	0.60 (0.21, 0.99)*	0.39 (0.10, 0.68)*	0.94	0.347	0.21
2.3	Self-monitoring of behavior	15	35	0.27 (-0.16, 0.69)	0.53 (0.25, 0.80)*	1.05	0.297	-0.26
2.4	Self-monitoring of outcome(s) of behavior	4	5	--	--	--	--	--
2.5	Monitoring outcome(s) of behavior by others without feedback	2	2	--	--	--	--	--
2.7	Feedback on outcome(s) of behavior	7	10	0.75 (0.20, 1.29)*	0.42 (0.17, 0.67)*	1.19	0.238	0.33
3.1	Social support (unspecified)	12	26	0.49 (0.19, 0.78)*	0.45 (0.20, 0.69)*	0.38	0.706	0.04
3.2	Social support (practical)	4	10	--	--	--	--	--
3.3	Social support (emotional)	3	6	--	--	--	--	--

4.1	Instruction on how to perform a behavior	30	57	0.48 (0.19, 0.77)*	0.43 (0.14, 0.72)*	0.33	0.746	0.05
4.2	Information about antecedents	27	63	0.54 (0.25, 0.84)*	0.38 (0.10, 0.66)*	1.09	0.279	0.16
4.3	Re-attribution	12	29	0.47 (-0.03, 0.97)	0.45 (0.17, 0.73)*	0.07	0.942	0.02
5.1	Information about health consequences	3	6	--	--	--	--	--
5.2	Salience of consequences	2	2	--	--	--	--	--
5.3	Information about social and environmental consequences	28	56	0.42 (0.14, 0.70)*	0.49 (0.22, 0.75)*	0.52	0.606	-0.07
5.4	Monitoring of emotional consequences	3	6	--	--	--	--	--
5.5	Anticipated regret	1	2	--	--	--	--	--
5.6	Information about emotional consequences	5	15	0.47 (0.02, 0.92)*	0.45 (0.21, 0.70)*	0.09	0.926	0.02
6.1	Demonstration of the behavior	18	29	0.66 (0.28, 1.04)*	0.39 (0.12, 0.65)*	1.41	0.162	0.28
6.2	Social comparison	18	33	0.57 (0.11, 1.02)*	0.42 (0.14, 0.70)*	0.56	0.575	0.15
6.3	Information about others' approval	5	9	0.08 (-0.67, 0.83)	0.50 (0.24, 0.75)*	1.04	0.302	-0.42
7.1	Prompts/cues	2	4	--	--	--	--	--
8.1	Behavioral practice/rehearsal	48	92	0.51 (0.25, 0.76)*	0.29 (-0.06, 0.64)	1.36	0.177	0.16
8.2	Behavior substitution	26	58	0.36 (0.06, 0.66)*	0.52 (0.25, 0.79)*	1.07	0.288	-0.17
8.3	Habit formation	2	2	--	--	--	--	--
8.4	Habit reversal	3	4	--	--	--	--	--
8.6	Generalisation of target behavior	16	35	0.54 (0.15, 0.94)*	0.43 (0.16, 0.70)*	0.57	0.571	0.12
8.7	Graded tasks	3	4	--	--	--	--	--
9.1	Credible source	3	4	--	--	--	--	--
9.2	Pros and cons	7	19	0.58 (0.02, 1.14)*	0.44 (0.19, 0.69)*	0.49	0.628	0.14
9.3	Comparative imagining of future outcomes	3	6	--	--	--	--	--
10.1	Material incentive (behavior)	4	11	--	--	--	--	--
10.2	Material reward (behavior)	16	29	0.32 (-0.10, 0.74)	0.50 (0.23, 0.77)*	0.78	0.439	-0.18

10.3	Non-specific reward	10	15	0.37 (-0.20, 0.94)	0.47 (0.21, 0.73)*	0.33	0.742	-0.10
10.4	Social reward	9	22	0.58 (0.21, 0.95)*	0.43 (0.18, 0.68)*	0.90	0.368	0.15
10.5	Social incentive	2	4	--	--	--	--	--
10.6	Non-specific incentive	4	10	--	--	--	--	--
10.9	Self-reward	6	8	0.65 (0.07, 1.23)*	0.44 (0.18, 0.69)*	0.73	0.470	0.21
11.2	Reduce negative emotions	16	36	0.49 (0.06, 0.93)*	0.44 (0.15, 0.73)*	0.21	0.833	0.06
12.2	Restructuring the social environment	2	4	--	--	--	--	--
12.3	Avoidance/reducing exposure to cues of behavior	1	4	--	--	--	--	--
12.4	Distraction	2	4	--	--	--	--	--
12.5	Adding objects to the environment	3	4	--	--	--	--	--
13.1	Identification of self as role model	2	2	--	--	--	--	--
13.2	Framing/reframing	19	45	0.41 (0.04, 0.79)*	0.47 (0.20, 0.75)*	0.29	0.775	-0.06
13.3	Incompatible belief	1	1	--	--	--	--	--
13.4	Valued self-identity	2	10	--	--	--	--	--
13.5	Identity associated with changed behavior	1	1	--	--	--	--	--
14.1	Behavior cost	2	4	--	--	--	--	--
14.3	Remove reward	1	2	--	--	--	--	--
14.4	Reward approximation	2	3	--	--	--	--	--
15.1	Verbal persuasion about capability	2	6	--	--	--	--	--
15.2	Mental rehearsal of successful performance	4	6	--	--	--	--	--
15.4	Self-talk	16	27	0.61 (0.20, 1.02)*	0.41 (0.13, 0.68)*	0.93	0.354	0.21
16.3	Vicarious consequences	2	8	--	--	--	--	--

Note. BCT = Behaviour Change Technique; # IG = number of intervention groups; # ES = number of effect sizes; CI = confidence interval; -- = not included in analysis due to lack of data

*$p < 0.05$