Universal School-Based Programmes for Improving Social and Emotional Outcomes in Children Aged 3-11 years: A Systematic Review and Meta-Analysis

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Submitted to the Coordinating Group of:

☐ Crime and Justice
☒ Education
☐ Disability
☐ International Development
☐ Nutrition
☐ Social Welfare
☐ Other:

Plans to co-register:

☐ No
☒ Yes ☒ Cochrane* ☐ Other
☐ Maybe

*Cochrane Developmental, Psychosocial and Learning Problems Group

Date Submitted: 06 January 2016
Date Revision Submitted: 14 February 2016
Approval Date:
Publication Date: 01 March 2016
TITLE OF THE REVIEW

Universal School-Based Programmes for Improving Social and Emotional Outcomes in Children Aged 3-11 Years: A Systematic Review and Meta-Analysis

BACKGROUND

What is Social and Emotional Learning?

Social and emotional learning is an umbrella term which can encompass a large number of competencies and concepts. While there is no agreed upon definition of social and emotional learning there have been efforts to define the core competencies that are generally targeted by social and emotional learning programmes. For example, the American Collaborative for Academic, Social and Emotional Learning (CASEL, 2015) identified five core competencies: self-awareness; self-management; social awareness; relationship skills; and responsible decision making. Waters and Sroufe (1983) describe these social and emotional competencies as being important in enabling children “to generate and coordinate flexible, adaptive responses to demands and to generate and capitalize on opportunities in the environment” (p. 80). In the UK, The Young Foundation (McNeil, Reeder, & Rich, 2012, p.18-19) identified a core set of social and emotional capabilities that have been shown to be important throughout the lifespan, including: communication; confidence and agency; planning and problem solving; relationships and leadership; creativity; resilience and determination and managing feelings.

In the UK, personal and social development is addressed at the policy and practice level through the Every Child Matters agenda (Department for Education and Skills, 2004), the guidance issued for schools which specifically uses the term social and emotional learning (Department for Education and Skills, 2005) and the increased awareness of holistic and ecological approaches to education. This has been evidenced most recently by the Department for Education’s new fifth priority (Department for Education, 2015), which seeks to prepare children for life by ensuring they are well rounded, have a wide and varied skills base and are confident, resilient and strong.

How does it develop with age?

Social and emotional skills develop across a number of different areas. Within the context of universal school-based programmes aimed at promoting social and emotional learning, a useful framework for understanding how core skills are learnt and developed, and thus the relevance of this for children at preschool and primary/elementary school, is provided by Mayer and Salovey (1997). Their framework emphasises the personalised nature of emotional learning and link this with Bowlby’s (1969) attachment theory as relationships and attachments were deemed vitally important. Typical development of social and emotional skills begins at birth (DCSF, 2008) and continues through reactions to adaptive or
maladaptive emotions, such as fear or hunger, and further develops in a number of ways. Children normally begin very early on by identifying their own emotions and facial expressions (Mayer & Salovey, 1997), as well as being able to discuss and identify these same emotions in other people. Basic psychological processes give way to more psychologically integrated processes as the child develops. As a child moves through the continuum of development suggested by Mayer and Salovey (1997), they begin to use emotions to consider multiple perspectives, and will be increasingly able to empathise and sympathise with others (Decety, 2015).

Children begin to understand and discuss complex and simultaneous feeling as well as the transitions between these emotions and the links between emotions; indeed it has been noted that understanding the progression of these feelings and their importance to relationships is a key component of emotional intelligence (Mayer & Salovey, 1997). As children become more adept at recognising and discussing emotions they begin to develop their emotional regulation skills and the importance of separating emotions from behaviour (Fivush, 2013). In this way emotional and social learning and their accompanying social skills are constantly being refined and altered according to what the child has seen and been taught. Some of the last abilities to develop are those which relate to identifying, analysing, managing and regulating emotions in oneself and others (Fivush, 2013; Mayer & Salovey, 1997). This regulation may facilitate emotional and intellectual growth in children and allow them to enhance positive emotions and moderate negative emotions and their associated behaviours.

Further research on both emotional development (Denham, 1998) and emotional competence (Saarni, 1999) has revealed how complex the idea of social-emotional learning is. Additionally, the role of competent adults in the development of socio-emotional skills and capabilities has been deemed essential, and adults can greatly impact the way children react to situations, and the rate at which they progress emotionally and socially. Yet there has long been concerns raised about the disconcerting mismatch between the known importance of these domains and their status in policies, practice and programming (Denham, 2006; Denham, Lydick, Mitchell-Copeland, & Sawyer, 1996).

**Why are these programmes so important?**

Universal school-based social and emotional learning programmes are important for a number of reasons. Programmes that are delivered in the school setting are important as children do not learn in isolation, rather they construct meaning based on their life experiences (Vygotsky, 1978), and the relationships they have built can either facilitate or impede the learning process (Zachary, 2012; Zeidner, Matthews, & Roberts, 2009). Social and emotional skills are necessary antecedents for learning and concentrating, as well as providing a crucial skill set which allows children to work together, work with others and work alone in the school setting. This has been evidenced both nationally and internationally (Barry, Clarke, Jenkins, & Patel, 2013; Weare & Nind, 2011; Yoshikawa et al., 2015). By
enhancing these basal skills and ensuring that children have developed the prerequisite skills for learning to take place children are more likely to be successful in school. Children who fail to achieve developmental milestones associated with social and emotional learning may be at risk of failing to make meaningful relationships with their peers and with the school situation (Zins, Bloodworth, Weissberg, & Walberg, 2007; Zins & Elias, 2007).

There is also a growing consensus in academic and policy circles regarding the importance of children’s social and emotional development and its links to a wide range of later outcomes, including academic, behavioural and health outcomes (Ciarrochi et al., 2002; National Institute for Health and Clinical Excellence, 2008; Petrides et al., 2004). Social and emotional outcomes are indicative of both educational outcomes and general life trajectories. Educationally, the importance of how children feel about learning, themselves as learners and the learning process has been well documented and a range of socio-emotional factors are seen to have an impact on educational achievement (Banerjee, Weare & Farr, 2014; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011); thus, the development of core social and emotional skills are necessary pre-requisites for educational attainment.

Finally, deficits in basic skills, such as the ability to identify emotions, appear to have wide ranging implications, including being rejected by others and excluded from peer activities and being victimised (Lemerise & Arsenio, 2000). Such deficits are also related to lower peer-rated popularity and teacher-rated social competence (Leppanen & Hietanen, 2001; Mostow, Izard, Fine, & Trentacosta, 2002). Chronic physical aggression during primary school also increases the risk of violence and delinquency through adolescence in boys (Broidy et al., 2003; Nagin & Tremblay, 1999). In turn this can lead to destructive forms of emotion management, such as alcohol abuse. A lack of social-emotional skills can have consequences which are far reaching and long lasting (Durlak, Domitrovich, Weissberg, & Gullotta, 2015). The importance of interventions to target deficits in social and emotional skills is clear then, as children who do not possess these skills are more likely to suffer: academic consequences such as lack of attainment and educational underachievement; short term consequences such as being ostracised by their peers; and long term consequences such as violence and inability to create and sustain meaningful relationships.

**How are schools enhancing social and emotional learning?**

Schools have employed a variety of interventions aimed at the social and emotional sphere of learning. Evidence suggests that well-designed, school-based prevention programmes can be effective in improving a variety of social, health and academic outcomes for children and young people (Greenberg et al., 2003; Greenberg, 2010). With this in mind, school-based interventions take on a variety of forms and are delivered in a variety of ways, by teachers, assistants and outside facilitators. Schools may deliver social and emotional learning programmes which teach skills directly, which educate children about relevant issues (such as abuse) or which aim to foster better relationships and attachments around the school
situation (Jones & Bouffard, 2012). Delivering these programmes in schools allows pupils time to practice and master the skills they have learnt in a non-threatening way.

Moreover, social and emotional learning programmes are seen to be of vital importance between the ages of 3 to 11, when children are developing and mastering social and emotional skills which will remain in place for life. Schools which promote socio-emotional learning and which embed an overarching socio-emotional learning programme into their culture may be more likely to enable children to learn these vital skills.

**OBJECTIVES**

The objectives of the review are:

1. To identify, appraise and synthesise evidence on the effectiveness of universal school-based social and emotional learning programmes.
2. To identify what programme-related components, either individually or in combination, impact on effectiveness (such as parental involvement, types of activities specified and the use of external facilitators).
3. To assess if the programmes are differentially effective for different subgroups; most notably in relation to age, gender and socio-economic background.
4. To identify active ingredients across programmes which are associated with greater gains, and how these may differ between subgroups.
5. To develop a set of clear and specific recommendations, based on the evidence reviewed, to guide the further development and delivery of universal school-based social and emotional learning programmes.

**EXISTING REVIEWS**

The Campbell and Cochrane systematic review libraries were searched in January 2016 for completed and ongoing reviews relevant to this area. This search found a number of relevant ongoing or completed reviews:

- A review of universal school-based social information processing interventions for aggressive behaviour (Wilson & Lipsey, 2006). This review only included studies published until 2003 and focussed mainly on violence reduction and prevention as opposed to broader social emotional learning.

- A review of school-based programmes to reduce bullying and victimisation (Farrington & Ttofi, 2009; last updated in March 2010). This review only considered evaluations which measured bullying or aggression towards peers but did not consider wider social and emotional skills.
• A review of self-control programmes for reducing delinquency and problem behaviours (Piquero, Jennings, Farrington, & Jennings, 2010). This review did not have an explicit focus on universal, school-based programmes (79% of included studies were school-based, and only a third were universal).

• A review of school-based interventions for reducing disciplinary school exclusion (Valdebenito, Eisner, Farrington, Ttofi, & Sutherland, 2015; title registered January 2015). Similarly, the ongoing review by Valdebenito et al. has maintained this focus on school exclusions and thus does not include a wider range of social emotional learning measures.

• A review of school-based executive functioning interventions (Steenbergen-Hu, Olszewski-Kubilius & Calvert, 2015; title registered September 2015). This review focusses solely on core components of executive function, and aims to use direct executive function outcomes and so does not focus on wider social and emotional learning.

• A review of mindfulness-based interventions for improving academic achievement, behaviour and socio-emotional functioning of primary and secondary students (Maynard, Solis & Miller, 2015), which focusses on using mindfulness tools to improve overall school performance as opposed to social and emotional learning specifically.

• A review of practices and programme components for enhancing prosocial behaviour in children and youth (Spivak, Lipsey, Farran, & Polanin, 2015). This review focusses on pro-social behaviour in the classroom setting, and does not have a specific focus on interventions aimed at the broader range of social and emotional outcomes.

• A review of effective programmes for social and emotional learning (Cocoran & Slavin, title registered January 2016). This review is mainly focused on academic attainment outcomes, and how social and emotional programmes impact attainment. This review does not have a focus on social and emotional outcomes.

In the general research literature, several other reviews have been conducted in the area of social and emotional learning (SEL) programmes (i.e., Browne, Gafni, Roberts, Byrne, & Majumdar, 2004; Clarke, Morreale, Field, Hussein, and Barry, 2015; Payton et al., 2008; Wilson & Lipsey, 2007). The most relevant of existing review is Durlak et al.'s (2011) meta-analysis, which focused on school-based programmes and their impact on a number of pupil outcomes including: SEL skills, attitudes, positive social behaviour, conduct problems, emotional distress and academic performance. Durlak et al.'s searches were conducted up until the end of 2007. Clarke et al.'s (2015) recent review focussed only on literature published in the UK and did not include a meta-analysis as studies were included which did not include control groups.
Since these reviews have been published, there have been a number of evaluations conducted on interventions aimed at pupil emotional wellbeing and behaviour through universal social and emotional learning programmes. An up-to-date systematic review including more recently published articles is therefore needed. Additionally, whilst there are a number of ongoing or completed narrative reviews which focus on individual programmes, specific social and emotional outcomes or specific niches or facets of socio-emotional development, the reviews which have been (or are being) completed currently do not systematically review, map and assess the wide range of social and emotional learning programmes currently being used in schools for children aged 3-11. This proposed review will therefore be more wide-ranging and inclusive and will allow for the inclusion of more recent literature emerging in the field.

Finally, this review is seeking to address a broader set of questions regarding the overall impact of universal school-based SEL programmes and, within this, has a particular focus on comparing the effectiveness of different types of intervention, and for different subgroups, in order to determine whether there are any underpinning programme-specific components that are associated with greater effects. These objectives require a broad-based review that has not been attempted by any of the reviews listed above.

**INTERVENTION**

Any universal programme, delivered on a whole-class or school basis that includes an explicit social and emotional learning component and is delivered in a pre-school/kindergarten or primary/elementary school setting as part of the normal school day. The social and emotional learning component needs to include a specific aim of improving outcomes for children in at least one of the five SEL domains outlined in the Outcomes section below.

The intervention may be delivered by the class teacher, other school personnel and/or non-school personnel. Interventions will need to run for at least six weeks to be included.

**POPULATION**

Children age 3 to 11 years old attending pre-school/kindergarten or primary/elementary school.

Any studies that target children outside the above age range, or target specific sub-groups of children (such as children with a conduct disorder), will not be included. As the focus is on universal interventions, interventions for specific disorders (CD, ODD) or developmental disabilities (e.g., autism, ADHD) will not be included.
OUTCOMES

In relation to social and emotional learning, outcomes that fall within any of the following five domains will be included:

- **Self-Awareness**: Emotional recognition, socio-emotional competence (emotional regulation, sympathy, empathy, comforting), self-confidence, confidence and agency.

- **Self-Management**: Child wellbeing, aggressive or difficult behaviour, conduct problems, antisocial impulse regulation, resilience, behaviour, determination and managing feelings.

- **Social Awareness**: Bullying and victimisation, sharing, assisting others in need.

- **Relationship Skills**: Prosocial behaviour, attachments, peer relationships, teacher relationships, communication, leadership.

- **Responsible Decision Making**: School exclusion and educational attainment (based on standardised test results), cooperating, educational aspirations, planning and problem solving.

STUDY DESIGNS

Eligible study designs will need to meet the following two criteria:

- individual or cluster randomised controlled trials; and
- studies evaluating interventions that meet the above criteria for eligible interventions.

No limitations will be placed on year of publication or language that the study has been published in.

The following types of studies will therefore be excluded:

- studies that do not include a control group and/or that do not involve the random allocation of subjects to intervention and control conditions (e.g. quasi-experimental designs);

- studies in which the intervention was delivered in an after-school setting or without a school-based component (e.g. in youth clubs, summer clubs, sports or social clubs, or through parenting groups);

- Studies in which the intervention was targeted at specific sub-groups, including those with pre-existing social, emotional, behavioural or academic problems.
REFERENCES


# REVIEW AUTHORS

**Lead review author:** The lead author is the person who develops and co-ordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the on-going updates of the review.

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STAKEHOLDER ADVISORY GROUP

A small stakeholder group will be established in order to provide ongoing advice and support. The membership of the Group, and its precise terms of reference, will be reported in the protocol. The Group will consist of: teachers and school principals; parents; policy makers from the Department of Education (Northern Ireland); and the Public Health Agency (Northern Ireland). The Group will be consulted on the protocol and will be asked to read and comment on the draft of the full systematic review report. In particular, they will be asked to contribute to the interpretation of the key findings, particularly in relation to their implications for future policy and practice.

ROLES AND RESPONSIBILITIES

Please give a brief description of content and methodological expertise within the review team. It is recommended to have at least one person on the review team who has content
expertise, at least one person who has methodological expertise and at least one person who has statistical expertise. It is also recommended to have one person with information retrieval expertise. Please note that this is the recommended optimal review team composition.

- Content: Connolly, Miller, Hanratty
- Systematic review methods: Hanratty, Miller
- Statistical analysis: Connolly, Miller
- Information retrieval: Mooney, Hanratty

FUNDING

Do you receive any financial support, and if so, from where? What are your deliverable deadlines for the review?

Review authors Connolly and Miller were awarded funding from the Public Health Agency (Northern Ireland) to conduct the proposed review. A full draft of the report is due for submission to the funders by 31 August 2016.

POTENTIAL CONFLICTS OF INTEREST

For example, have any of the authors been involved in the development of relevant interventions, primary research, or prior published reviews on the topic?

None of the review authors has a financial interest in this review. None of them has been involved in the development of interventions on the scope of the present one. Some of the authors (Connolly, Miller, Hanratty) have either completed and/or are currently running trials of interventions that may fall within the scope of this present review. Hanratty is currently conducting a Cochrane systematic review of child-focused interventions for anger and aggression in young children.

PRELIMINARY TIMEFRAME

Note, if the protocol or review are not submitted within 6 months and 18 months of title registration, respectively, the review area is opened up for other authors.

- Date you plan to submit a draft protocol: 29 February 2016
- Date you plan to submit a draft review: 31 August 2016
AUTHOR DECLARATION

Authors’ responsibilities
By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

Publication in the Campbell Library
The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review, and subsequent updates in the Campbell Library. The Campbell Collaboration places no restrictions on publication of the findings of a Campbell systematic review in a more abbreviated form as a journal article either before or after the publication of the monograph version in Campbell Systematic Reviews. Some journals, however, have restrictions that preclude publication of findings that have been, or will be, reported elsewhere and authors considering publication in such a journal should be aware of possible conflict with publication of the monograph version in Campbell Systematic Reviews. Publication in a journal after publication or in press status in Campbell Systematic Reviews should acknowledge the Campbell version and include a citation to it. Note that systematic reviews published in Campbell Systematic Reviews and co-registered with the Cochrane Collaboration may have additional requirements or restrictions for co-publication. Review authors accept responsibility for meeting any co-publication requirements.

I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:

Form completed by: Paul Connolly
Date: 14 February 2016