Journey to the Island of Calm

Evaluation Summary

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June 2018

Griffith UNIVERSITY

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1. Background

Pathways to Resilience Trust contracted Dr Jennifer Cartmel, School of Human Services and Social Work, Griffith University to undertake an evaluation of the Journey to the Island of Calm program. A pilot evaluation was conducted in Term 4, 2016. The information gathered during this pilot was used to revise the program and develop additional resources to support teachers. The evaluation reported in this paper was conducted between 2016 and 2017.

The program has accrued positive gains for children in their self-regulation and self-understanding. The significant increase in their positive motivational state to engage in schooling has benefits, as higher hope has been found to correlate with academic achievements (Synder et al, 2003) and a greater sense of wellbeing. The children who participated in the program showed more focused behaviours to engage in classroom learning.

1.1 Limitations

This evaluation was conducted in order to examine the change in children's sense of agency and ability to manage their social and emotional wellbeing. It is difficult to undertake long-term evaluations, especially in schools where there is a turnover of children and staff. It is also noted that some of the issues involved in assessing social and emotional wellbeing are complex, particularly combining components such as feelings, beliefs, behaviour, character and temperaments. Furthermore, elements such as the health of children, family structure, culture and development of children affects their performance socially, emotionally and academically (Squires, Bricker & Twombly, 2003). It was not possible to gather data about these elements during this evaluation. However, rich data was collected during the implementation of the program that provides an understanding of the experiences of the children and staff who participated in the program.

I've learnt that you can control your body and calm yourself down.
(Student, Site 1)

2. About the Journey to the Island of Calm program

2.1 Journey to the Island of Calm

Journey to the Island of Calm aims to support the social and emotional learning of upper primary school aged children. The program is suited to children 9-12 years of age in the later years of primary school. Children in this age group are increasing in the mental competence that influences their ability to self-regulate and manage their social and emotional wellbeing, as well as preparing to make the transition to high school.
Journey to the Island of Calm explicitly teaches social and emotional skills: the abilities, habits and mindsets that enable young people to develop self-awareness, build positive relationships with others, and approach everyday tasks and challenges with focus, adaptability and persistence.

The program does this by bringing to life a story in which the students, as the Captains of Their Own Lives, embark on a journey from the Captain's Academy to the Island of Calm. As they sail, they explore fictional locations and meet fictional characters, including figures from mythology. At each of the twelve stages of the journey, social and emotional skills are taught through the activities and challenges the Captains must face.

The activities help the children to self-regulate, and become more optimistic and capable in problem solving. These skills contribute to a growth mindset that supports learning. The Journey to the Island of Calm program is useful in supporting the learning of all children, however it is particularly useful for children from low socio-economic circumstances and vulnerable family circumstances. These children often present in the school setting with difficulties in regards to social and emotional skills and wellbeing.

2.2 Links to the Australian Curriculum

2.2.1 Journey to the Island of Calm is based on research about the social and emotional development of children. The impetus for the program is linked to educational policies as well as identified community concerns about the wellbeing of Australian children. The *Journey* program directly supports Goal 2 of the *Melbourne Declaration on Educational Goals for Young People*: *All Australians become successful learners, confident and creative individuals, and active and informed citizens.* It also provides an additional way for teachers to *expand opportunities for all students to reach their potential as successful young people, create a culture of engaging learning that improves achievement for all students and inspires lifelong*

learning, and caters for individual student's social and emotional needs (*Every Student Succeeding,* DET). With regards to the Australian Curriculum, it most closely aligns with the General Capability of *Personal and Social Capability* to which the *Personal, Social and Community Health* component of the Health and Physical Education curriculum is a key contributor. The General Capabilities of the Australian Curriculum specifically outline the need for students to develop social and emotional skills. The core skills being developed throughout the program enable students to grow as learners who are confident in themselves and their own strengths, can direct and sustain their attention, express their own needs and feelings, develop empathy for others, and make informed decisions; qualities essential to all subject areas.

2.2.2 The F-10 Curriculum document states:

'In the Australian Curriculum students develop personal and social competence as they learn to understand and manage themselves, their relationships, lives, work and learning more effectively. This involves recognising and regulating their emotions, developing concern for and understanding of others, establishing positive relationships, making responsible decisions, working effectively in teams and handling challenging situations constructively'.

Students develop personal and social competence skills.

They develop:

- Self-awareness
- Self-management
- Social awareness
- Social management.

The inclusion of these capabilities in the Australian Curriculum is significant and needs to be maintained. The evidence on social and emotional learning (SEL) indicates that these capabilities are an aspect which is critical to student success and the ability to both attain and use academic skills.

2.2 Social and Emotional development of school age children

Social and emotional skills are considered essential for success throughout the lifespan (Dayan, 2016; Tough, 2012). Positive social and emotional skills have been linked to many encouraging outcomes, including higher academic performance, healthy social relationships, resilience, and less maladaptive behaviours (Dayan, 2016; Duong & Bradshaw, 2017: Jones & Doolittle, 2017). The term SEL has been developed over the last 25 years to educate children in positive social emotional competencies in order to improve interpersonal relationships and academic achievement (Dayan, 2016). In this time, many programs have been developed to implement SEL for students, each tailored for different age groups ranging from birth to the final years in high school. The leading body of SEL research, monitoring evidence-based practice and policy-making is the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2013) who describe SEL as:

“Social emotional learning involves the processes through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.”

Social and emotional skills are critical to being a good student and eventually a good contributor to society, and a means to maintaining good quality of life by preventing or reducing risky behaviours such as drug use, violence and bullying (CASEL, 2013; Schonert-Reichl et al., 2015). Extensive research identifies the most effective way to achieve this is to implement SEL education in the classroom where students engage

in positive activities, through explicit and implicit methods, and strengthen parent and community involvement in program planning, implementation, and evaluation (CASEL, 2013). The core competencies of SEL have been defined as:

1. Self-awareness; the ability to accurately recognise one's emotions and thoughts and their influence on behaviour. This includes accurately assessing one's strengths and limitations and possessing a well-grounded sense of confidence and optimism.
2. Self-management; the ability to regulate one's emotions, thoughts, and behaviours effectively in different situations. This includes managing stress, controlling impulses, motivating oneself, and setting and working towards achieving personal and academic goals.
3. Social awareness; the ability to take the perspective of and empathise with others from diverse backgrounds and cultures, to understand social and ethical norms for behaviour, and to recognise family, school, and community resources and supports.
4. Relationship skills; the ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. This includes communicating clearly, listening actively, cooperating, resisting inappropriate social pressure, negotiating conflict constructively, and seeking and offering help when needed.
5. Responsible decision making; The ability to make constructive and respectful choices about personal behaviour and social interactions based on consideration of ethical standards, safety concerns, social norms, the realistic evaluation of consequences of various actions, and the well-being of self and others (CASEL, 2013).

SEL uses a combination of psychological, neurobiological and educational methods to achieve long-term positive social and emotional practices (Jones & Doolittle, 2017; Schonert-Reichl et al., 2015). The psychological advances in SEL are based on the research exploring mindfulness, positive psychology and cognitive behavioural therapy (Dayan, 2016; Gueldner & Feuerborn, 2016). This is because these practices encourage people to focus their attention on the present moment, internalise their emotions and attitudes, and build a strength-based and solution-focused mentality, and train people to adjust their thoughts and attitudes, and to improve intrapersonal communication (Dayan, 2016; Greenberg & Harris, 2012; Zelazo & Lyons, 2012).

In terms of the neurobiology perspective, research on neuroplasticity gives great understanding of brain development, interrelated with SEL. The process of learning develops neural pathways in the brain when the information repetitively interconnects the same neural pathways over time (Davidson & McEwen, 2012; Immordino-Yang, 2016). Therefore, the process of educating young minds on social and emotional competencies across their developmental years increases their ability to maintain the information through adulthood, impacting on their whole lives (Davidson & McEwen, 2012). As positive social and emotional practices are learnt, educating children from birth through their schooling years is paramount for long-term positive outcomes. Strong social and emotional skills in life are crucial to obtain, even more so than what is currently included in traditional pedagogy curriculums, such as literacy and mathematics (Bernard, 2012; Jones & Doolittle, 2017).

As children's learning capacities develop across ages, SEL programs need to be structured to meet an age appropriate education level (CASEL, 2013). Upper primary school aged children, between 9 and 12 years of age, require a different SEL program to that of early primary school children, as they will be more adjusted and experienced in their social and emotional competencies, and different again to that of early adolescence, where they will be transitioning into more complex social and emotional skills (Humphrey, 2013; van der Aalsvoort, 2010 as cited in Jarvela, 2011). SEL programs must also consider student engagement in learning and meet age appropriate interests (Ainley, 2010 as cited in Jarvela, 2011). As children enter upper primary school, there is an expectation that they will begin to draw upon previously acquired knowledge and apply their social emotional skills to engage in more critical thinking (Duong & Bradshaw, 2017). Furthermore, they begin to receive more performance evaluation from their schoolteachers, which may be a contrast to the often positive feedback received in their earlier years (Duong & Bradshaw, 2017). Therefore, children in this age group require specific SEL that meets their developmental needs and strengths.

In the primary school stage, children's personalities, behaviours and capabilities begin to amalgamate before further strengthening, as they become adolescents and then adults (Schonert-Reichl, et, al., 2015). It is in this transitional stage that the brain synapse production increases considerably in the prefrontal cortex, influencing the development of executive functioning: cognitive control abilities that organise and regulate behaviour (Hertzman, 2012; Schonert-Reichl, et, al., 2015). There is a prolonged developmental path of synaptogenesis in the prefrontal cortex that corresponds with executive functioning abilities from late childhood to mid-adolescence, suggesting that synaptogenesis is a contributing factor to cognitive control maturation (Knapp & Morton, 2013). Furthermore, changes in neural organisation in late childhood are associated with changes in self-regulatory and self-reflective capability (Zelazo & Carlson, 2012) and children become less egocentric as they develop the capacity to consider different perspectives, develop the capacity to distinguish right and wrong and act pro-socially (Eisenberg, Fabes, & Spinrad, 2006 as cited in Schonert-Reichl, et, al., 2015). As the upper primary school ages are at a stage of significant transformation, neurologically, psychologically and socially, SEL programs play a crucial role in supporting children's social and emotional development.

3. Method

The program evaluation used a mixed methodology. The research design included a literature review, surveys, observations and interviews. Data was collected from children, teachers and the program facilitator. There was a need to ensure that the evaluation methodology was respectful of the participants so they did not feel that they were over-researched. Children in the program completed the Hope Scale (Synder, 1997, 2003) which was embedded in the first and last session of the program (see appendix 1). Interviews were conducted with the classroom teachers using the Most Significant Change Methodology (Davies & Dart, 2005). The facilitator kept a research journal for the period of the implementation of the intervention. The journal used the Circle of Change Revisited model (COCR (Macfarlane, Cartmel, Casley & Smith, 2014) to record reflective and analytical thinking.

The evaluation was conducted in a timely manner with the limited resources available. A pilot evaluation was conducted in Term 4, 2016 with two classes of Yr 6 (n=54) children. In Semester 1 2017, four classes of Yr 5 and 6 (n=86) children at Site 2 participated in measures to evaluate the program, and this was followed in Semester 2 2017 with two additional classes of Yr 6 (n=45) children at Site 3.

	Dates of data collection	Hope Scale	Interviews/ Focus group	Schuhfried Assessment
Pilot - Site 1	July – Dec 2016	Children n= 54 Week 1 and week 8	Teachers n=2	
Site 2	Feb – Jun 2017	Children n= 86 Week 1 and Week 12	Teachers n=4 Children n=8	Children n=31
Site 3	July – Dec 2017	Children n= 45 Week 1 and Week 12	Teachers n=1	

The qualitative data was analysed using a grounded theory approach (Strauss & Corbin 1997) and involved multiple readings of the data to generate themes and subthemes, and to investigate how they were related to one another (Strauss & Corbin 1997).

3.1 Ethics

The Knowledge Partnership between Pathways to Resilience Trust and Griffith University has ethics approval (GU 2016/512). Additional material is linked to the application as needed. Permission was sought from each school principal. The *Journey to the Island of Calm* program was part of the school curriculum. Parents were informed about the program and were asked to let staff know if they wanted to ' opt out' – this meant that their children's information would not be included as part of the data collection, but would not prevent them participating in the program. All material was de-identified. A separate invitation was extended to children to participate in the focus group at Site 2. The first 8 children to return the consent form participated in the focus group. Ethics was also sought from Education Queensland to undertake focus group.

3.2 Literature Review

The evaluation included a systematic literature review. The aim of the systematic review was to illuminate the key factors required to develop and implement effective SEL programs for upper primary school children. A systematic search of published literature was conducted which included the following online databases: Griffith University Library (2012-2018, Full-text online), Informit (2012-2018), SAGE Journals (2012-2018), ProQuest (2012-2018), Scopus (2012-2018, English language), and Cochrane Library (2012-2018). In addition, databases were searched from the 11th December 2017 to 22nd December 2017 using a Boolean search. These included searches such as children AND "social emotional learning" AND mindfulness. As there were limited relevant (related to upper primary school aged children, children aged between 9 and 12) studies that contained the term 'children', a broad set of free-text search terms was developed. These included terms such as 'elementary children', 'primary school children', and 'school-aged children' because of their similarities to the concept of 'upper primary school aged children'. A specific search on Aboriginal and Torres Strait Islander children was conducted to identify specific research concerning this minority group. Search terms such as "mindfulness", "cognitive behavioural therapy" and "brain development" were also used to ascertain research linking social emotional learning (SEL) and the above search terms. A total of 56 articles were identified as relevant to the topic at hand and suitable for further analysis into whether they were to be included or excluded from the review. After applying the inclusion criteria, 21 articles remained for the review. A recommendation from the review is that a holistic approach is considered when developing SEL programs incorporating psychological, sociological and neurobiological aspects of children's development.

3.3 Surveys

Two survey tools were used to measure the change in the children pre and post the intervention. The Hope Scale was embedded in the intervention and the NEUROMITE cognitive ability assessment was administered by Schufried Australia.

3.3.1 Hope Scale

The Children's Hope Scale is a self-report tool where hope is defined as goal-directed thinking in which the child has the perceived capacity to find routes to goals (pathways thinking), and the motivation to use those routes (agency thinking) (Synder, 2002). Higher hope has been correlated to positive outcomes in school achievement. Higher hope is related to (1) secure attachments (Shorey, Snyder, Yang, & Lewin, 2003), and (2) greater satisfaction with interpersonal relationships (Snyder, 2002). Children's ability to engage in learning is built on the foundation of pursuing goals. This scale is used to measure change in children's sense of agency and pathways, which is linked to their capacity and strategy to pursue goals. The higher hope children perceive that they have, the more they feel they are in control in their lives, which is significant to life-long learning strategies.

3.3.2 NEUROMITE

NEUROMITE is a cognitive ability assessment (Schufried Australia) http://www.neuromite.com.au/cognitive-and-non-cognitive-assessments/) for students that focuses on the measurement of basic attentional abilities including visual alertness and sustained attention, auditory focus and distractibility, and complex focus and task distractibility. 31 children in Year 5 had the opportunity to undertake pre and post testing on changes to their abilities.

3.4 Focus Groups

Eight participants were selected using non-probability sampling techniques to provide feedback about their experience participating in the program (Prause, 2018). Only children who had participated in at least one session of the *Journey* program were approached to participate in the focus groups. The small sample size was determined based on the children's age and ability to generate quality responses. A small group of the children were more likely to be able to listen to each other's ideas and be more respectful of each participant's shared experiences, thoughts and feelings. Even though eight children were selected only 7 participated as one child was absent on all three occasions when the focus groups were held.

The researcher who conducted the focus groups participated in the *Journey* program with two classes on two occasions prior to commencing the focus groups. The objective was to build rapport with the children, demonstrating friendliness and familiarity prior to the focus groups. Building rapport increased interaction as demonstrating interest in children's thoughts and experiences can create a stronger researcher-child relationship (Freeman & Mathison, 2008). During the interactions with the children, the researcher discussed the research process and provided clarity as to why the researcher was present, and how children might get involved in the study.

The focus group data was gathered using six strategies including a researcher's journal, focus groups, children's drawings, reflections of emotion cards, video and audio recordings. The researcher used phenomenological methods to explore the experience from the children's perspective. The three focus groups were conducted on school premises. The focus group strategy acknowledged children as the experts, providing an opportunity to share information in order to explore themes more deeply (Prause, 2018). All focus groups were recorded and transcribed. Drawings were used to engage children in conversation about the *Journey* program. Observation indicated this method of data collection provided a challenge for the children, who felt uncertain of what to draw (Researcher Journal, 31.05.17).

3.5 Interviews and Journals

Researchers and the program facilitator kept journals through the period of the program with jottings about observations of behaviours and interactions, particularly between children. The facilitator's journal also contained responses from the children and staff that were gathered during the implementation of the program.

4. Findings

4.1 Literature Review

Key Findings from the literature review were:

- There is limited literature about SEL programs for upper primary school children;
- SEL programs should integrate mindfulness and yoga practices to support top-down and bottom-up processing.
- SEL programs could be more inclusive of children unique to mainstream, including children from different cultural backgrounds, language ability, and who experience disabilities and/or mental health issues. It has been identified that children may need adapted SEL programs to meet their specific needs and strengths.

More detailed results of the review are contained in Appendix 3.

4.2 Children's responses

4.2.1 Future Goals (Hope Scale)

A Wilcoxon Signed Rank Test revealed a statistically significant increase in sense of hope following participation in the *Journey* program, The difference between pre and post scores was significant (z = -2.94, p, .003). It must be noted that 60% of children had an increase in sense of agency. Reviewing the items on the scale it is the response to the following question - "I think the things I have done in the past will help me in the future" that has shown the greatest shift. This aligns with the use of the reflective sessions within the program. This is a key motivator for children linked to an understanding about the importance of their schooling experiences to future aspirations.

4.2.2.Schufried NEUROMITE cognitive ability assessment

68% of children showed an improvement in Visual Alertness and also Processing Auditory and Visual information. These skills are significant in children's capacity to engage in classroom learning lead by teachers, so the Schufried results matches well with sense of agency in the Hope Scale around confidence and positive self-worth.

Students with poor visual alertness may take longer to process visual information before they can adequately respond and may need additional early warnings or cues to signal when they need to do something. Students with poor sustained attention are likely to be frequently distracted when faced with the same tasks over a long period of time or flit from one task to another without seeing one through to completion. These students find it harder to refocus and stay focused in noisy and busy environments. This makes it difficult for them to complete learning tasks. It also creates a stressful environment for the teachers who spends their time managing behaviours rather than supporting learning.

The increase in visual alertness and processing visual and auditory information after the participation in the *Journey* program changed the classroom climate. The ripple effect was that students were able to focus on learning tasks. This increased 'real' teaching and learning time and heighted students' success and capacity to meet learning challenges. The ability to listen to others and concentrate/focus within group activities appears to have been a challenge for these children - there have been gains in their capacity to participate in group activities.

I have noticed over time, particularly in second term, that I'm not seeing overt acts of anger, either words or actions, in my classroom (Teacher 2).

4.2.3 Focus Group

The children participating in the *Journey* program and analysis of the data suggests children used program teachings and lingo to respond to the researcher's questions.

"*So why do you think you do that activity* [breathing]?"
(Researcher, FG: 31.05.17)

"*It calms us down*" (Mia, FG: 31.05.17)

"*It relaxes our bodies*" (Erin, FG: 31.05.17)

"*To relax us*" (Alice, FG: 31.05.17)

"*Does it relax you?"* (Researcher, FG: 31.05.17)

"*Ummmm*" (Nathan, FG: 31.05.17)

"*A little bit?"* (Erin, FG: 31.05.17)

[When asked how they felt about the program]

"*It was positive*" (Emily, FG: 31.05.17)

"*Kindness*" (Amy, FG: 31.05.17)

"*Hope for the future*" (Mia, FG: 06.06.17)

[When asked what the program was about]

"*To calm yourself so you don't get in trouble*" (Alice, FG: 13.06.17)

"*Teach you how to calm yourself down*" (Erin, FG: 13.06.17)

"*To not give up*" (Mia, FG: 13.06.17)

"*It keeps us out of work, and it teaches us to stay calm*" (David, FG: 13.06.17)

When asked how children felt after they had been participating in *Journey* for three sessions a child stated, *"Normal…because I knew what was going on"* (Nathan, FG: 06.06.17). The children in the focus group utilised strategies they had learnt in the *Journey* program to help them maintain their attention within the group and complete the task of telling the researcher about their involvement in the program.

The impact of the program could have influenced behaviours at home as well as school classroom. The depth of change for individual children was self-reported. Children appear to see themselves as subordinate to adults in a child-adult relationships within a school environment. It would have been useful to ask staff to take more observations about changes in children's behaviour. The attendance patterns of the children influenced the collation of results.

Our interpretations of this information have to be shaped by the understandings of the self-awareness of the children, evidenced through their comments within the focus group. The ability to listen to others and concentrate/focus within group activities appears to have been a challenge for these children, however there were gains in their capacity to participate in group activities.

It was also noted that different data collection tools showcase different gains. One of the children in the focus group did not show huge improvements in the Schufried score yet was a reflective and insightful participant in the focus group.

4.3 Journal and Interview responses

Journey to Island of Calm encouraged critical reflectiveness and self-expression. It was perceived to be a positive experience for students and teachers.

I learnt how to control my anger and not take it out on others. I learnt who to trust and who is the better person to trust. (Facilitator Journal – Responses form children final session).

Child-led and creative activities were significant to the program and research process. The facilitator (August, 2017) described in her journal how she was able to create a sense of safety for the children in the *Journey to the Island of Calm* and noted the following as key strategies:

- Regulating through rhythm, movement and breathing
- Following a predictable routine
- Setting students up for success
- Teaching through story
- Connecting and building relationships

The students' self-reports to the facilitator about their reflection on their personal growth as a 'captain' demonstrate their self-awareness in these comments:

> *I felt at first I was a bit scared because I didn't know what we were doing then I got used to coming here and I felt happy and safe.*
>
> *I felt kind of sceptical and just a little nervous, but now I feel kind of good. I used to sit at the back but now I sit down here on the floor.*
>
> *I've learnt how to build better connections with people. (Participants, Site 2)*

The responses reported demonstrate that a higher number of children had a positive change in their ability to self-regulate. The ability to self-regulate influenced the students' engagement in classroom activities as well as building relationships with peers. The ability to self-regulate is significant to children's sense of wellbeing and subsequently their motivation to engage in classroom learning.

I am so intrigued and pleased with how the level of engagement from my students has improved each session. They seem to be more connected and accountable in regards to the topics being covered. My students are a lot more comfortable with talking about self-awareness and being more considerate of how others' feelings and personalities differ. (Teacher 7)

5. Strengthening the program

The development of a facilitator's manual and lesson plans to accompany the *Journey* program as well as the professional development offered to teachers prior to their classes becoming involved with the program, strengthened the positive impact the program has on children's wellbeing. At Site 1 a coaching model was offered to the classroom teachers, however as there was no one to cover the teachers' role these sessions did not occur. In Sites 2 and 3 an introductory session was provided for staff about the theory and research underpinning *Journey to the Island of Calm*. This increase in knowledge made a difference to the commitment of the teachers to utilise the strategies recommended in the program on a daily basis (Facilitator Interview, 2017).

It is well documented in research both overseas and in Australia that the educators' engagement and active support is the single biggest predictor of whether SEL

programs will be successful and benefit the students. Support is likely to be intermittent unless SEL is established and embedded within the curriculum. These skills can and should be explicitly taught rather than left to chance in the hope that students will simply pick them up through the course of their life.

The most successful implementation of SEL is through a whole school approach with a structured program/curriculum. This ensures that:

- Students learn skills in a systematic way
- Students practise skills
- Teachers model skills during their interactions with students
- The teacher reinforces the skills everyday
- Teachers create specific opportunities for skill practise
- Teachers use natural opportunities for practise of skills
- All adults in the school use the skills
- The skills become part of school culture (CASEL, 2013)

6. Conclusion

Each individual has a unique genetic, epigenetic and developmental history and therefore it is difficult to have a one size fits all approach to working with children and adults. It is important to select a unique sequence of enrichment and education interventions. *Journey to the Island of Calm* is based on the understanding that the brain develops sequentially and is organised from the bottom up, with connections starting with basic body functions low in the brainstem, and moving up to the highest functions in the cortex. Understanding that all four areas of the brain work in concert with connections from bottom to top and top to bottom has the potential to support children to achieve in school.

The findings from the data collected support the evidence that if students are calm, they can access the highest parts of their brain. They can focus their attention and work in groups, share responsibility, and enjoy most interactions with their peers. They can handle the stress of learning new things, including learning more about how to build relationships with family and friends, they can engage in creative work, using the things they know to create new things, and they can problem solve key skills in learning literacy and numeracy.

When students become alarmed or feel unsafe, they will act emotionally or drift into daydreams as they try to escape this heightened stress level. They cannot learn well, and will start to activate their fight or flight mechanism. They start to act out or seem disengaged. No clear thinking can happen in this state. Learning is impossible. Further, the individual will not even remember what has happened. The *Journey to the Island of Calm* program has supported students to self-regulate and focus their attention thus this intervention helped students to learn in school classrooms.

Unless we do regulate ourselves and then help regulate our children, no learning or reasoning is even possible (Perry, 2006-2012)

7. References

References listed here are in addition to the literature review

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8. Appendices

APPENDIX 1: Overview Journey to the Island of Calm

Children explore the key idea that when their mind and body are calm, they can direct their attention wherever they want it to go, listen to themselves and others, and choose how they want to be in the world. In other words, they can be the Captain of Their Own Lives. The twelve core lessons explore this by asking students to:

1. Direct their attention to their mind and listen to their self-talk so they can engage fully in experiences, gain skills and knowledge and choose to be optimistic, even in the face of challenges.
2. Direct their attention to their body and listen to what it is communicating so they can name their emotions and calm themselves when an unpleasant emotion starts to grow bigger.
3. Direct their attention to their heart and listen to what makes them happy so they can use their strengths, create positive memories and act with kindness to themselves and others.
4. Direct their attention to the people around them and listen to them so they can build friendships and work together to achieve their goals.

The program is delivered to students through an introductory session and 12 core lessons. Each session runs for 45 minutes. A Facilitator Manual, lesson plans, teacher resources and classroom posters form the basis of each session, and students engage in structured regulating experiences, group activities and reflective discussions to explore and practise new skills. In addition, the reflective activities in the Captain's Logbook allow them to engage with the material in a deeper way.

The program is delivered by a facilitator to class groups (25-30 children). Prior to the delivery of the program the facilitator had provided some professional development to the classroom teachers.

Duration: An introductory session followed by 12 core lessons

Session times: 45 minutes

The Key Idea Underpinning the Program:
When your mind and body are calm, you can direct your attention wherever you want it to go, listen to yourself and others, and choose how you want to be in the world. You can be the Captain of Your Own Life! Calming your mind and body so you can direct your attention and listen in this way takes practise. Every day!

Session Structure:

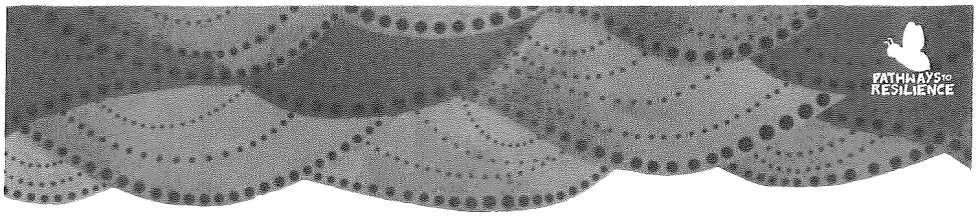
1. **Direct your attention to your MIND** and listen to your self-talk so you can engage fully in experiences, gain skills and knowledge, and choose to be optimistic, even in the face of challenges.
    - Set Your Course – *I embrace new experiences*
    - Guide Your Rudder – *I direct my attention*
    - Train Your Parrot – *I notice my self-talk*

2. **Direct your attention to your BODY** and listen to what it is communicating so you can name your emotions and calm yourself when an unpleasant emotion starts to grow bigger.
    - Scan Your Boat – *I listen to my body*
    - Know Your Crew – *I name my emotions*
    - Handle Rough Weather – *I calm myself*

3. **Direct your attention to your HEART** and listen to what makes you happy so you can use your strengths, create positive memories and act with kindness to yourself and others.
    - Hoist Your Sails – *I celebrate my strengths*
    - Savour the Journey – *I savour happy moments*
    - Captain with Kindness – *I practise kindness*

4. **Direct your attention to the PEOPLE around you** and listen to them so you can build friendships and work together to achieve your goals.
    - Create Strong Bonds – *I build friendships*
    - Cultivate a Positive Team – *I value support*
    - Map Your Way Forward – *I plan to succeed*

Journey to the Island of Calm brings to life a story in which the students, as the Captains of Their Own Lives, embark on a journey from the Captain's Academy to the Island of Calm. As they sail, they explore fictional locations and meet fictional characters, including figures from mythology. At each of the twelve stages of the journey, social and emotional skills are taught through the activities and challenges the Captains must face. Core Lessons are structured around creative, hands-on experiences designed to give students an embodied understanding of the topics explored, and opportunities for reflection are embedded throughout to support the students' growing self-awareness as they develop the skills and strategies they need to have hope for the future and a sense of agency.



JOURNEY TO THE

ISLAND OF CALM

APPLICATION

FOR TRAVEL TO THE ISLAND OF CALM

Captain's Name:

Why do you want to travel to the Island of Calm?

Please answer the following questions about yourself:

1. I think I am doing pretty well

☐ None of the time ☐ A little of the time ☐ Some of the time ☐ A lot of the time ☐ Most of the time ☐ All of the time

2. I can think of many ways to get the things in life that are most important to me

☐ None of the time ☐ A little of the time ☐ Some of the time ☐ A lot of the time ☐ Most of the time ☐ All of the time

3. I am doing just as well as other kids my age

☐ None of the time ☐ A little of the time ☐ Some of the time ☐ A lot of the time ☐ Most of the time ☐ All of the time

4. When I have a problem, I can come up with lots of ways to solve it

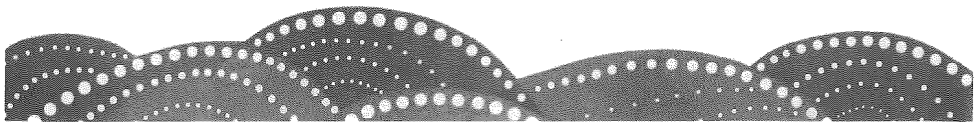
☐ None of the time ☐ A little of the time ☐ Some of the time ☐ A lot of the time ☐ Most of the time ☐ All of the time

5. I think the things I have done in the past will help me in the future

☐ None of the time ☐ A little of the time ☐ Some of the time ☐ A lot of the time ☐ Most of the time ☐ All of the time

6. Even when others want to quit, I know I can find ways to solve the problem

☐ None of the time ☐ A little of the time ☐ Some of the time ☐ A lot of the time ☐ Most of the time ☐ All of the time



Evaluation question (linked to outcomes)	Indicator/s	Data collection method	Data collection tool	Sample	Ethics and consent process	Who will collect this data?	When will this data be collected?	How will this data be analysed? By who?
Can children recognise and understand their emotions?	Scores for hope	Survey	Hope Scale	Site 2 n=45 Site3 n=86	GU Ethics 2016/512	Program facilitator	Site 2 and 3 Feb-Dec 2017	Scale Dr Jennifer Cartmel
Can children recognise and understand their emotions?	Self-reports about behaviour changes	Interview	3 semi-structured focus groups	N = 8	GU Ethics 2016/512	HDR Student Amanda Prause	June 2017	Grounded theory - themes Dr Jennifer Cartmel Marilyn Casley Amanda Prause
Is there improved student wellbeing and academic outcomes?	Academic improvement Engagement in learning	Interview		Teachers Site 1 n=2 Site 2 n =4	GU Ethics 2016/512	External Evaluator – Dr Jennifer Cartmel	Site 1: Pilot Dec 2016 Site 2 Aug 2017	Grounded theory - themes Dr Jennifer Cartmel Marilyn Casley Cindy Dawson

APPENDIX 2: Program logic – Journey to Island of Calm

Program Objective: *Journey to the Island of Calm* is a Social and Emotional Learning program for upper primary aged children. The metaphor of a Journey is used to illustrate the way we can face challenges, and survive stronger and more knowledgeable, then go on to share our experiences.	
Problem statement	• Children in the upper primary years are experiencing adverse social and emotional development that impacts on capacity to engage in learning in school settings
Inputs	• Children, teachers and a qualified program facilitator • Funding • Partner organisations • Research and evidence about what works • Program resources (Facilitator Manual with lesson plans, teacher resources, classroom posters and Childrens' Activity Book called Captain's Logbook-has Children's Hope Scale (Synder, 1997, 2003) embedded as beginning and final session activities) • Time (conducted in 2016) • Knowledge about neuroscience and learning • School classroom environment and learning spaces • Additional assessment provided by school principal from one class of students only - NEUROMITE cognitive ability assessment (Schufried Australia)
Outputs: Activities	• The program brings to life a story in which the students, as the Captains of Their Own Lives, embark on a journey from the Captain's Academy to the Island of Calm. As they sail, they explore fictional locations and meet fictional characters, including figures from mythology. At each of the twelve stages of the journey, social and emotional skills are taught through the activities and challenges the Captains must face.
Outputs: Participation	• Children in the upper years of primary school • Teaching staff will also gain some valuable techniques for supporting the wellbeing of children
Short-term outcomes 0-20 weeks	• Changes in children • Improved Student knowledge and skills • Development of a growth mindset that supports children's learning of social and emotional skills • Development of capacity to recognise and understand their own emotions, values and strengths • Improved children ability to be attentive and engage in the

	classroom learning program • Improved capacity and ability of children to succeed in school and learning • Improved ability to manage behaviour, overcome obstacles and achieve high academic outcomes

<table>
<tr><td>Medium-term outcomes
20 weeks to 12 months</td><td colspan="2">Improved Student sense of agency and decision making
Improved Student social and emotional skills and wellbeing
Improved Student attendance and re-engagement in school
Realistic assessment of their own abilities and a well-grounded sense of self-esteem and self-confidence
Perceive and understand other peoples' emotions and viewpoints
Show understanding and empathy for others, identify the strengths of team members, define and accept individual and group roles and responsibilities, be of service to others
Develop self-discipline, resilience, adaptability and initiative
Form positive relationships, manage and influence the emotions and moods of others, cooperate and communicate effectively with others, work in teams, build leadership skills, make decisions, resolve conflict and resist inappropriate social pressure</td></tr>
<tr><td>Long-term outcomes
12 months – onwards</td><td colspan="2">Improved children mental health and social and emotional wellbeing
Children are self-aware, able to self-manage and have social awareness and management
Children are able self-regulate, and become more optimistic and capable in problem solving
Reduced number of children reporting depression and anxiety
Improved Student academic outcomes
Increased number of children attentive and engaging in the classroom learning program
Increased number of children succeeding in school and learning</td></tr>
<tr><td colspan="2">Assumptions: The development of this program has the potential to support teachers in schools and educators in school age childcare to enhance the development of children's social and emotional wellbeing. The program has been designed to provide resources to use with existing curriculum materials. It is a program structured with the most up-to-date information about neuroscience.</td><td>External Factors: Australian children are reporting higher rates of anxiety.</td></tr>
<tr><td colspan="3">Impacting factors: Contextual environment and low school attendance</td></tr>
</table>

APPENDIX 3: Literature Review about SEL programs of children in upper primary school

The literature review used a narrative synthesis as the method of analysis as the findings were from multiple-studies. A narrative synthesis involves an initial synthesis of findings, an exploration of the relationship in the data, an assessment of the quality of the evidence and, if appropriate, the development of a theoretical model about the way in which an intervention works (Arai, Britten, Popay, Roberts, Petticrew, Rodgers & Sowden, 2007). Accordingly, quality appraisal and evaluation of the data were used to facilitate the current narrative synthesis.

Findings

Psychological aspect

The latest step in well-being psychology is “third wave” behavioural therapy interventions which emphasis the application of approaches that focus on mindfulness, emotion, metacognition, acceptance, values and relationships (Siegel et, al., 2008 cited in Gueldner & Feuerborn, 2015). A number of studies have tested mindfulness attention training in conjunction with SEL and identified its methods as a complementary approach to improve children’s cognitive skills and social and emotional well-being (Schonert-Reichl, et, al., 2015). Gueldner and Feuerborn (2015) identified the importance of incorporating mindfulness-based practice (MBP) into SEL programs as their findings showed an enhancement in student’s interpersonal and intrapersonal skills, particularly self-awareness and emotional regulation. Gueldner and Feuerborn (2015) propose that mindfulness is a natural fit with SEL as it affects key aspects of social and emotional practice positively.

Research by Schonert-Reichl, et, al. (2015) identified mindfulness as a significant factor in positively contributing to SEL for children in late primary school. Their study identified mindfulness attention training in conjunction with SEL improved student’s cognitive skills and social and emotional well-being. Schonert-Reichl, et, al. (2015) suggest SEL interventions that include mindfulness, particularly at the upper primary school ages, may support children in the changes they are experiencing both in their bodies and in their minds by giving them the tools to consciously and compassionately relate to the changes. Furthermore, the mindfulness strategies are considered beneficial across the school curriculum as it is linked to creating more compassionate and interpersonal qualities that benefit school culture and academic performance (Schonert-Reichl, et, al., 2015; Gueldner & Feuerborn, 2015). However, Gueldner and Feuerborn (2015) recommend the need to implement MBP in conjunction with SEL in order to be effective as it is important for children to receive coordinated, explicit instruction in social emotional understanding and regulation.

Butzer, Bury, Telles and Khalsa (2016) compared SEL programs and school-based yoga programs in terms of their benefit to student self-awareness and self-regulation to identify whether they would be compatible to implement collaboratively. They identified the main differences between yoga and many SEL programs is that yoga integrates both the mind and body, training students in self-regulation, mind-body awareness and physical fitness, leading to long-term changes in brain activity and structure (Butzer, et al., 2016). Research on school-based yoga supports the notion that yoga interventions positively effect several factors, including emotional balance, focusing attention, cognitive processing, emotional and physical stimulation and reduces anxiety and negative thought patterns (Butzer, et al., 2016; Serwacki and Cook-Cottone, 2012).

Furthermore, Butzer, et al. (2016) highlight that practicing yoga at school supports student's development in self-regulation and mind-body awareness, which provides a bottom-up process for social emotional skill development, rather than a top-down approach many SEL programs are based from (Butzer, et al., 2016). Other researchers have identified yoga and mindfulness-training to integrate both top-down (cognitive, attention) and bottom-up (autonomic, interceptive) approaches to enhance stress-coping abilities and self-regulation (Zelazo & Lyones, 2012; Gard et al., 2014; Butzer, et al., 2016). Essentially, as emotions can be generated from both top-down and bottom-up, it is important to engage students from both aspects in SEL programs (Zelazo & Lyones, 2012; McRae, Misra, Prasad, Pereira & Gross, 2012).

Contemporary SEL programs are expected to consider the benefits of third wave interventions and implement them into program delivery. The advances of mindfulness, yoga and meditation present a positive supplement to current SEL programs as they factor a more holistic approach to social emotional development. This is particularly influential for upper primary school aged children as they prepare for the transition into adolescents and become further independent where tools learnt from third wave practices can be beneficial. Although third wave behavioural interventions are a more recent consideration for implementing SEL programs, the fundamental psychological aspects of many resilience-building programs include cognitive behavioural therapy techniques (Dayan, 2016; Yamamoto, Matsumoto & Bernard, 2017). Dayan (2016) argue that SEL programs largely incorporate cognitive behavioural therapy techniques in their practice and is therefore an essential psychological aspect of effective SEL programs along with third wave interventions.

Sociological aspect

Bronfenbrenner's ecological systems theory is commonly referred to in many of the literature commenting on social theoretical aspect of SEL programs (Garner, Mahatmya, Brown & Vesely, 2014; Smith, O'Grady, Cubillo & Cavanagh, 2017; Duong & Bradshaw, 2017). This theory maintains that each individual child interacts with five environmental systems: microsystem, mesosystem, exosystem, macrosystem and chronosystem, which are the primary catalysts for development (Bronfenbrenner and Morris 2006). Understanding the different ecological systems that influence a child's development is essential to the creation and implementation of effective SEL programs (Garner, Mahatmya, Brown & Vesely, 2014).

Research in the United States has explored the impact of SEL programs on children from different ecological backgrounds, including ethnicity/race, gender and socio-economic status (SES). Garner, Mahatmya, Brown and Vesely (2014) compared research that explored key factors that impacted the effectiveness of SEL programs for children of Caucasian American, African American, Latino American and Asian American backgrounds. Their findings uncovered that there were inconsistencies in research as some supported the notion that African American and Latino American children did not improve with SEL programs, some showed greater improvement and other studies showed no differences between ethnicities after receiving an SEL program (Garner, Mahatmya, Brown & Vesely, 2014). Similarly, there were mixed findings presented in studies that compared the effects of SEL programs on gender and SES in Garner, Mahatmya, Brown and Vesely's (2014) literature review. They concluded that further research is required to better understand the impact social influences have on children's social and emotional development. In Australia there is certainly room for further research exploring SEL program effectiveness concerning differing ethnicity and sociocultural factors.

Research exploring SEL programs appropriateness and effectiveness for Aboriginal and Torres Strait Islander students is particularly limited, yet Indigenous Australians face greater social and emotional challenges than mainstream Australians. Smith, O'Grady, Cubillo and Cavanagh (2017) identified this need and developed the Kids Matter Aboriginal Social and Emotional Wellbeing Project with Aboriginal consultation. Aligning with their literature review on culturally safe practices, Smith, O'Grady, Cubillo and Cavanagh (2017) integrated Critical Theory and Narrative Therapy into the SEL program along with developing culturally appropriate and empowering animated videos (Smith, O'Grady, Cubillo & Cavanagh, 2017). It is essential to implement cultural strength, traditional practices, and kinship support in the social and emotional development of Aboriginal children. A report on the outcomes for adolescent Aboriginal girls SEL initiative identified a critical need for community Elders support and Aboriginal Education Officers involvement to effectively engaging Aboriginal girls in the program (Dobia et al., 2014).

Dobia et al. (2014) identified that a regular issue faced was that Indigenous priorities and perspectives did not always line up with white Anglo expectations, norms and practice of the SEL program. SEL programs designed and implemented by non-Indigenous practitioners need to recognise the assumptions and use of language that could misrepresent meanings and potentially breakdown relationships.

Duong and Bradshaw (2017) examined links between SEL outcome trajectories and childhood home, parental, and community contextual predictors measured in middle childhood (grades 3 through 5). Five key SEL competency outcomes were explored: altruistic behavior, empathy, self-efficacy for peer interaction, normative beliefs about aggression, and ADHD symptomatology. Their findings identified specific home, parental, and community contexts which were linked to childhood SEL trajectories, suggesting that SEL may be flexible between middle and late childhood, highlighting an opportunity for prevention programing to improve adolescent outcomes. More specifically, Duong and Bradshaw's (2017) findings showed that positive parenting had positive influences on childhood empathy development. Furthermore, neighborhood social ties promoted stable levels of self-efficacy in children. In contrast, socio-demographic and community risk had undesirable influences on the beliefs concerning aggression among children, with potentially negative implications for their ability to make responsible decisions (Duong & Bradshaw, 2017). These social contexts represent possible SEL intervention targets to improve upper primary school aged children's development and wellbeing.

Neurobiological aspect

Research on social emotional competence in children suggests that, in order to improve intervention effectiveness, programs need to be tailored to the unique information processing strengths and needs of the child (Sticher, et al., 2012; Milligan, Phillips & Morgan, 2015; Cavioni, Grazzani & Ornaghi, 2017). From a neurobiological perspective, when children respond with strong emotional reactions they limit their ability to self-regulate and therefore completely engage their cognitive skills (Zelazo & Lyones, 2012), which may be further challenged if there is a presence of information processing challenges associated with learning disabilities (LD) or mental health difficulties (Milligan, Phillips & Morgan, 2016; Cavioni, Grazzani & Ornaghi, 2017).

Research by Milligan, Phillips and Morgan (2016) highlighted the need for SEL programs to be adaptable for children with LD as there is often more required for children with LD because there are typically challenges in building relationships with peers and experiencing classroom isolation, impacting on their self-efficiency, self-esteem and pro-socialness. Milligan, Phillips, and Morgan (2016) suggest that effective SEL programs for students with LD should include activities focused on communication skills such as managing a conversation, asking questions and listening skills, and social and emotional skills including self-regulation, anger management,

cooperation and perspective taking. These findings were supported by a similar study conducted by Cavioni, Grazzani and Ornaghi (2017).

Nelson, Kendall and Shields (2014) literature review identified the social, psychological and neurological factors that contributed to children's behaviours at school. Children who experienced significant stress in their environment, including amongst their families and peers, can develop protective behaviours (such as hypervigilance) that can become maladaptive in their ability to build emotional and social skills and engage in cognitive learning (Nelson, Kendall & Shields, 2014). This is a result of children's stress-response systems being overloaded leading to a reduction in neuroplasticity affecting emotional development. The plasticity of the prefrontal cortex, hippocampus, and amygdala areas of the brain (the areas that play a role in allostasis: the process of achieving stability) occurs largely through the neurobiological response to the emotions children experience (McEwen, 2012; Nelson, Kendall & Shields, 2014). SEL programs that focus on social integration and building stress coping mechanisms are therefore fundamental to mental health, physical health, and learning (McEwen, 2012).

Zelazo and Lyones (2012) study supported the notion that children in the preschool ages are malleable in their development of self-regulation when behavioural and neuroplasticity may be particularly prominent. Their study also suggests that the repeated combination of activity in the prefrontal cortex (mediating reflection) and the limbic system (mediating emotional experience) in response to emotional stimuli should strengthen connections between these neural regions, building the neural circuitry that supports emotion regulation across the lifespan (Zelazo & Lyones, 2012; Hertzman, 2012). Furthermore, a growing number of research is showing positive results for children engaged in SEL programs that aim to foster the development of self-regulation (particularly interventions targeting executive functioning, emotion regulation, and perspective taking (Zelazo & Lyones, 2012).

Ahlers, Gabrielsen, Lewis, Brady and Litchford (2017) recommend modified SEL programs to best support children with Autism Spectrum Disorder (ASD) by incorporating role-play, visual aids, structured worksheets, social stories, video modeling, and a wide variety of reinforcement strategies. Along with these adaptations, other researchers recommend modifying CBT procedures to engage with the child's particular interests and slow down the pace of the CBT sessions to allow extra processing time for children with ASD and intellectual disabilities (Spain et al., 2015). CBT can be considered a verbally demanding treatment and includes a focus on labeling emotions, abstract thinking, and verbal problem solving (Rosen, Connell & Kerns, 2016) and therefore considered by Ahlers et al. (2017) as not the best fit for children with ASD who have low verbal abilities. Although, CBT can provide positive results as a treatment for anxiety for low functioning individuals with ASD and people with intellectual disabilities and/or significant language impairment (Rosen, Connell &

Kerns, 2016 as cited in Ahlers et al., 2017). Further research on CBT for children with ASD and/or LD is required, especially if SEL programs utilise many CBT techniques.

Discussion

This systematic review sought to synthesise the available research on the key factors required for SEL programs to be effective for children in upper primary school, aged 9 to 12 years. Furthermore, it sought to critically appraise the methodological quality of this evidence. Despite there being a significantly high number of literature on SEL programs for children, there is limited research that applies to upper primary school aged children. Of the 21 articles identified as appropriate for this systematic review, a clear distinction was made between the focus areas that led to the categorisation of psychological, sociological and neurobiological aspects. Despite this distinction, many of the concepts revolving around children's social emotional development and well-being interrelated with factors from each aspect.

Literature that was categorised as a psychological aspect to SEL programs commonly explored third wave interventions, including mindfulness and yoga as key factors in developing effective SEL programs for children (Schonert-Reichl, et al., 2015; Gueldner & Feuerborn, 2015; Butzer, et al., 2016). This was consistent with the literature identified as neurobiological aspects, particularly evident in the findings on top-down and bottom-up processing strengthened through third wave interventions (Zelazo & Lyones, 2012). Furthermore, research supported the notion that children's neurobiological development around the upper primary school ages is typically pronounced as the prefrontal cortex strengthens and executive functioning begins to form. The neurobiological aspects of SEL programs were found to support the need to tailor SEL programs to meet the unique strengths and needs of the child, particularly for children experiencing a LD and/or mental health disorders such as ASD (Milligan, Phillips and Morgan, 2016; Ahlers, et al., 2017). Additionally, children impacted by high levels of stress can also be impacted on their ability to develop social and emotional skills. SEL programs from a sociological aspect recognise the child's environmental and sociocultural factors play a large role in their SEL. Particular consideration for SEL programs delivered in Australian schools is the evidence on Aboriginal and Torres Strait Islander children's social and emotional needs and strengths.

Research limitations

The majority of literature reviewed lacked a clear methodological approach to their own literature review, which prompts the question of how the research was collected, deemed appropriate and analysed. Only a few studies specified their approach to gaining their information in a methodology section (Garner, Mahatmya, Brown & Vesely, 2014; Dobia et al., 2014; Schonert et al., 2015; Cavioni, Grazzani & Ornaghi, 2017; Doung & Bradshaw, 2017). As the majority of literature did not stipulate their methods for obtaining their results clearly, the current literature is limited in its findings. This indicates a need for future research to be explicit in the way findings are identified. This systematic review identified a limited number of studies exploring SEL for upper primary school aged children, where many studies explored SEL for children in the early years and few more explored SEL for adolescents. As search results presented an abundance of research exploring SEL for children in the early years, this review included findings from some studies that covered age groups from preschool to upper primary school. Therefore limiting the quality of this review when specifying findings for 9 to 12 year olds. Finally, as literature on SEL for children across age groups is in abundance, being well documented over the last 25 years and as SEL incorporates many facets of a child's development, it was difficult to identify relevant literature for review. This limitation was reduced by searching for key terms such as "mindfulness", "Cognitive Behavioural Therapy", "Aboriginal and Torres Strait Islanders", and "brain development" to identify more specific literature before reducing literature further to include, mostly, upper primary school children.

Links between academic learning and SEL

Students who have heightened self and social awareness and feel good about themselves and others helps them improve their life outcomes and their success. This contributes significantly to the increased likelihood of students completing school. Students receiving quality SEL programs in the classroom compared with those who did not, would;

- Score an average of 11 percentile points higher on standardized tests;
- Show improved self-esteem and commitment in school;
- Engage less in classroom disruption and delinquent acts; and
- Experience less depression and anxiety (Durlak et al 2011).

Research is shedding light on the importance of SEL skills, in addition to academic learning, in building a broad set of competencies needed to be successful into the future (Bird and Sultman 2010, Dobia et al, 2013).

Conclusion

There is substantial evidence to indicate that third wave interventions are beneficial to children's SEL. Furthermore, there is research indicating that children who experience a LD and/or ASD require specific SEL programs to meet their needs and strengths. Although there is enough evidence to support the above notions, there is limited research on SEL for children in upper primary school, ages 9 to 12. Additionally, the quality of research, in terms of the methodology of the research at hand, is an area for greater development as the majority of research identified in the systematic review typically did not have clear methodologies stated. Given that upper primary school children are at a unique stage of development, it is vital for further research be conducted in order to support SEL program development for children of that age group. SEL programs need to come from a holistic approach incorporating the psychological, sociological and neurobiological aspects of a child in their social emotional development and well-being.

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APPENDIX 4

Glossary of terms

Adverse childhood experience: Everyday occurrences or one off experiences that children are subjected to during childhood. These experiences can be traumatic, disadvantaging or disempowering in nature, and affect children's cognitive and social and emotional development in early childhood.

Agency: Is the capacity of an individual to act independently and to make free choices.

Children's Voices: Children's expression of their thoughts, feelings and ideas about experiences in their lives.

Co-construction*:* A process by which adults and children work together to generate discussion and meaning in an endeavour to co-create knowledge for dissemination.

Co-research: A process by which adults and children work together to undertake research on a specific topic.

Consent: Giving or imparting permission to participate

Journey to the Island of Calm: A social and emotional learning program for upper primary aged children. The metaphor of a journey is used to speak of growth through adversity (Winstanley, 2017).

Wellbeing: A general term for the condition of an individual. It is a complex combination of a person's physical, mental, emotional and social health factors.