

Evidence Base

Table of Contents

Introduction	3
Improving the health and wellbeing of children	4
OT, Education & Mental Health	8
Building Resilience at School	11
Parent Teacher Partnerships	15
Resilience	18
Identity	21
Physical Activity	23

Introduction

We believe that schools should adopt interventions to improve the wellbeing of their students that are informed by evidence. When developing the philosophy, conceptual foundations and practical resources of The Me Tree for Schools we endeavoured to incorporate the best research evidence with our clinical expertise. This has developed a preventative program that we believe improves the mental health of children and improves academic success of students in the classroom.

The practise of incorporating evidence-based research into interventions is not only rapidly increasing, but is associated with producing programs that are more appropriate, efficient and effective. [1] Further, the Department of Education contends for the use of programs that have an evidence base that informs the school approach to building resilience. [2]

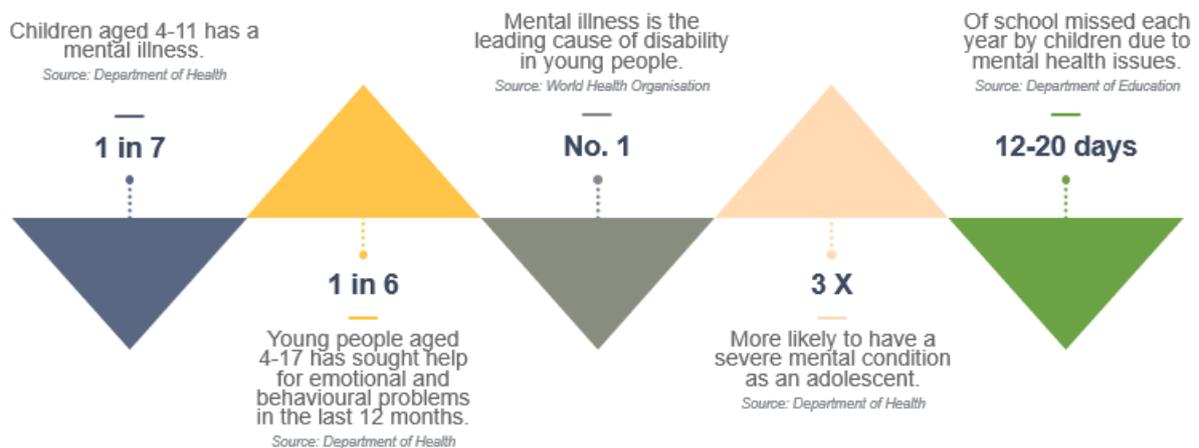
Whilst there are a variety of resilience programs on the market, many of these lack an in-depth evidence base to support their programs. We believe it is important for schools to understand the true benefits of building resilience in children in order to appreciate why programs like the Me Tree for Schools are integral.

REFERENCES

- [1] D. Upton, D. Stephens, B. Williams, & L. Scurlock-Evans, "Occupational therapists' attitudes, knowledge, and implementation of evidence-based practice: a systematic review of published research", *British Journal of Occupational Therapy* 77, No. 1 (2012): 24-38, doi: 10.4276/030802214X13887685335544
- [2] H. Cahill, S. Beadle, A. Farrelly, R. Forster, & K. Smith, *Building resilience in children and young people: A literature review for the Department of Education and Early Childhood Development (DEECD)*, literature review prepared for the Department of Education, (Canberra, 2017).
<http://www.education.vic.gov.au/school/teachers/health/mentalhealth/Pages/buildingresilience.aspx>

Improving the health and wellbeing of children

Ensuring children have good health during early childhood is vital for growth and development.^[1] The Victorian Government places a focus on ensuring children have the best start in life, by developing healthy habits and having access to quality childhood experiences and education.^[2] ^[3] Historically ensuring children have a healthy start in life has meant an emphasis on physical health - and mental health inequities, specifically in the population of children, is rarely addressed.^[4] However, in recent times there has been a societal shift, where addressing mental health is becoming vital in ensuring the overall health and wellbeing of children.^[5]



In Australia there has been an increase in the prevalence of mental illness in children. According to the Department of Health (2015), one in seven primary school aged children (aged 4-11) has a mental illness.^[6] However, as individuals get older the prevalence of mental health issues also increases, with the highest susceptibility during the teenage years. Adolescents (aged 12-17) are three times more likely to have a severe mental condition than children and are 5% more likely than adults to experience these issues.^[7] These statistics are exacerbated by the fact that 65% of adolescents do not seek professional help for their mental illness.^[8] Therefore, mental illness is not only significant for children and adolescents, but commonly is left untreated at this stage in life, making it the leading cause of disability in young people.^[9]

What happens if it is not addressed?

BURDEN OF DISEASE

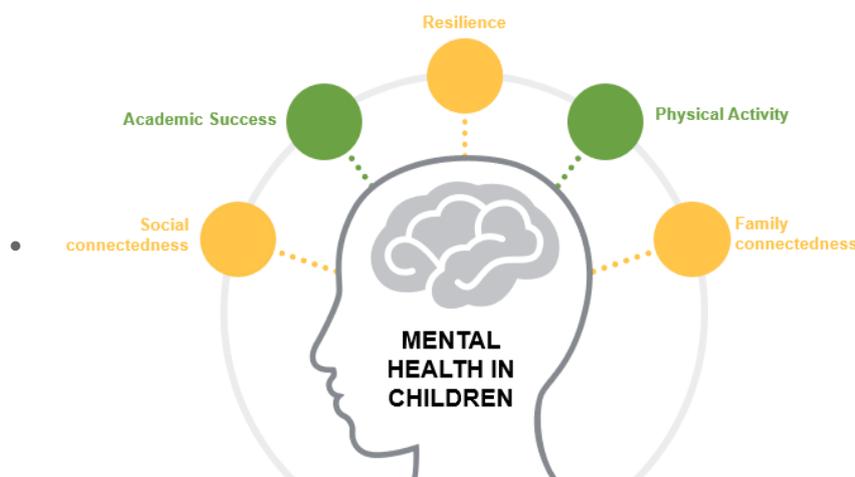
When mental health issues are not addressed during childhood, the burden of disease later in life increases.[10] Children grow up with a higher likelihood of developing health and developmental issues, which impacts on their ability to contribute to the community, fulfil their potential and engage in school and play.[11] Children with anxiety and depressive disorders were the most likely to report severe impact to their ability to participate in daily activities.[12]

AFFECTED PERFORMANCE AT SCHOOL

School aged children spend a majority of their time at school, participating in learning through academics and play. School and play are considered the primary occupations for children, with play having a vital role in guiding learning and skill development in early childhood.[13] [14] Research indicates that mental health issues can impact the functioning of children at school, as well as having negative implications for socialising, the family in addition to the child themselves.[15] Further, children with mental health issues such as depression and anxiety are likely to be absent for 12-20 days of school per year, which in turn resulted in academic and social difficulties as well as lower achievement and engagement in education.[16] [17] Over the course of a student's schooling this can equate to almost half a year. Here within it is apparent that mental health issues impact on a child's ability to engage in school activities, effects their productivity and therefore impacts their engagement in school.

Taking a preventative approach

In taking a preventative approach to the issue of mental health it becomes apparent that intervention needs to occur during the childhood years, as by building positive mental health strategies from a young age ensures that protective factors against mental health issues increase over the lifespan.[18] Increasing resilience, positive self-identity and physical activity are all protective factors for mental health issues in children.



The Department of Education places emphasis on enhancing resilience within the school setting, through the integration of resilience programs or models within their teaching

curriculum.[19] This includes the implementation of school-based programs, such as the Me Tree for Schools that utilises resources such as resilience, academic success, physical activity and family connectedness that targets the needs of this population.[20] [21]

How to Intervene?

The key to empowering this age bracket to take control of their mental health lies in intervening within the classroom. Whilst mental health issues can negatively impact a child's performance within the school setting, the school environment can inversely also provide an opportunity for addressing this issue. Schools and school curriculum play a key role in the social and emotional development of children. In addition to teaching academics, they also include strategies at home and a collaborative focus between school and home to teach children valuable life skills to build relationships, assert themselves and deal with conflict.[22] These are all personal skills that are integral in addressing mental health issues, and build the foundations of resilience that are carried into the teenage and adult years.[23]

The Me Tree for Schools utilises the productive occupation of school, to promote the development of protective factors against mental health issues for children. It encourages engagement in school and play for this population and works to prevent mental illness later in life.

REFERENCES

- [1] Department of Education, *Child health and development* (State of Victoria: 2017). <http://www.education.vic.gov.au/childhood/pa/health/Page/wellbeing.aspx>
- [2] K. Hesketh, & K. Campbell, *Give your kids a healthy start to life*, media release prepared for Deakin University, (Melbourne, 2015). <http://www.deakin.edu.au/about-deakin/media-releases/articles/give-your-kids-a-healthy-start-to-life>
- [3] Dept of Education, *Child health and development*.
- [4] Hesketh & Campbell, *Give your kids a health start to life*.
- [5] D. Satcher, "Report of the Surgeon Generals Conference on Children's Mental Health: A National Action Agenda", *American Journal of Health Education*, 32, No. 3: 179-182, doi: 10.1080/19325037.2001.10603461
- [6] D. Lawrence et al., *The Mental health of children and adolescents: Report on the second Australian child and adolescent survey of mental health and wellbeing*, research report prepared for the Department of Health, (Canberra, 2015). <https://www.health.gov.au/internet/main/publishing.nsf/Content/9DA8CA21306FE6EDCA257E20700016945/%File/child2.pdf>
- [7] Lawrence et al., *Mental health of children*.
- [8] Lawrence et al., *Mental health of children*.
- [9] "Mental health: Child and adolescent mental health" World Health Organisation, 2017, www.who.int/mental_health/maternal-child/child_adolescent/en/
- [10] V. Patel et al., "Mental health of young people: a global public-health challenge", *ScienceDirect*, 369, No. 9569 (2007): 1302-1313, doi: 10.1016/S0140-6736(07)60368-7
- [11] Patel et al., "Mental health of young people".
- [12] Lawrence et al., *Mental health of children*.
- [13] A. Cronin, & M. B. Mandich, ed., *Human Development and Performance Throughout the Lifespan* (Boston USA: Cengage Learning, 2016).
- [14] S. Rodger, *Occupational Therapy for Children* (Chichester UK: Blackwell Publishers, 2010).
- [15] Lawrence et al., *Mental health of children*.
- [16] Lawrence et al., *Mental health of children*.
- [17] Patel et al., "Mental health of young people".
- [18] Satcher, "Report of the Surgeon General".
- [19] Department of Education, *Building resilience* (State of Victoria: 2017). <http://www.education.vic.gov.au/school/parent/health/Pages/resilience.aspx>
- [20] Dept of Education, *Building resilience*.
- [21] Department of Education, *Child health and development* (State of Victoria: 2017). <http://www.education.vic.gov.au/childhood/pa/health/Page/wellbeing.aspx>

[22] Department of Health and Human Services, *A healthy start to school* (State of Victoria, 2017) <https://www.betterhealth.vic.gov.au/campaigns/a-healthy-start-to-school>

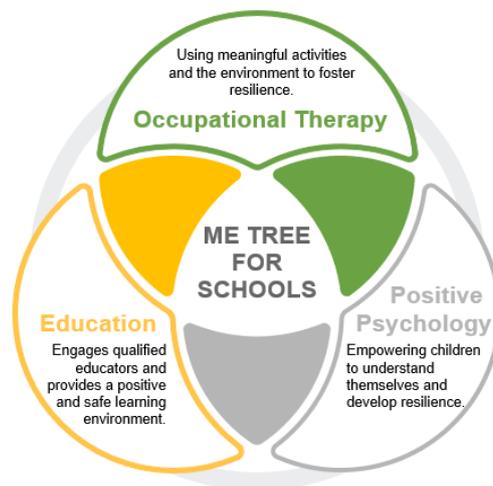
[23] Dept of Health, *A healthy start*.

OT, Education & Mental Health

Combining the unique advantages of Occupational Therapy, Positive Psychology, and School Education to build resilience in school aged children.

The Me Tree for Schools presents a unique approach for school communities to achieve the goal of happier, healthier, and more resilient students: combining the effective approach of Occupational Therapy (OT), positive psychology, and education.

Why Occupational Therapy, School Education and Positive Psychology?



Occupations are the activities people do everyday and are determined by the individual's roles and developmental stage.^{[1] [2]} School aged children spend a majority of their time at school, participating in learning through academics and play. School and play are considered the primary occupations for children, with play having a vital role in guiding learning and skill development in early childhood.^{[3] [4]}

Occupational therapists seek to understand an individual's identity, environment and goals to enable satisfaction and competence in desired activities.^[5] Occupational therapists are recognised as mental health practitioners, with their guiding principle being that the daily activities children participate in will improve their health and wellbeing.^{[6] [7]}

The Australian government is committed to ensuring Australian children reach their full potential to contribute in the community.^[8] To ensure academic competence, primary schools are reducing barriers to learning through enhancing the quality of teachers, improving the wellbeing of students and collaborating with parents.^[9] Children's wellbeing is emerging as an important factor in ensuring a child's academic success and social and emotional competence. The literature highlights that teaching mental health coping strategies was more effective when it was incorporated into the classroom curriculum compared to doing it independently.^[10]

Psychological skills such as self-regulation and identity are critical in improving wellbeing.[11] Vygotsky theorized that the children that are provided with relationship driven resources (e.g. encouraging relationships with teachers and peers) and engaging classroom activities develop self-regulation skills and tasks.[12] Hence, children must engage in both social relationships and educational activities for psychological skills to flourish.

Whilst many programs address student's resilience from utilising a psychological approach, The Me Tree for Schools combines occupational therapy, school education and positive psychology to encourage resilience at an individual and cultural level.

The theoretical models of occupational therapy emphasise a dynamic interaction between the occupation (activity), the child, and their environment so that participation in activities is influenced by the child's beliefs, experiences and identity along with the environment it occurs in.[13] The culture of the school environment and the process of school-based education support the use of occupation as a guiding resource to improve a child's resilience. Benson revealed that 90% of teachers and occupational therapists believe that working with primary school aged children in the school environment was beneficial in engaging the child. The school environment provides the opportunity, setting, and structure to tackle the issues faced by the child.[14]

The Me Tree for Schools has been developed based on experience and expertise in the fields of occupational therapy, psychology and primary education. It incorporates proven mental wellbeing strategies, based on psychological principles of identity and resilience, occupational therapy principals of meaningful activities being incorporated in school curriculum.

It is a hands-on, practical program that utilises activities such as life skills, physical and social activities to improve social behaviour and self-management in children – building capacity for improved mental health.

The Me Tree for Schools has the dual focus on academic learning and the promotion of wellbeing by using proven strategies – embedded into regular lesson plans – that are designed to promote successful and enjoyable participation throughout the day.

REFERENCES

- [1] J. Case-Smith & J. O'Brien, *Occupational Therapy For Children and Adolescents* (St. Louis, Missouri: Elsevier, 2015), 27-31.
- [2] H. Polatajko et al., "Specifying the domain of concern: Occupation as core," in *Enabling Occupation II: Advancing an occupational therapy vision for health and wellbeing & justice through occupation*, eds. E. Townsend & H. Polatajko (Ottawa: CAOT Publications, 2014), 19.
- [3] A. Cronin, & M. B. Mandich, ed., *Human Development and Performance Throughout the Lifespan* (Boston USA: Cengage Learning, 2016).
- [4] S. Rodger, *Occupational Therapy for Children* (Chichester UK: Blackwell Publishers, 2010).
- [5] S. Doble & J. Santha, "Occupational well-being: Rethinking occupational therapy outcomes," *Canadian*

- Journal of Occupational Therapy* 7, no.53 (2008: 184-190, url retrieved from: <http://journals.sagepub.com.ezproxy.lib.monash.edu.au/doi/pdf/10.1177/000841740807500310>
- [6] M. Arbesman, S. Bazyk, & S. Nochajski, "Systematic review of occupational therapy and mental health promotion, prevention and intervention for children and youth," *American Journal of Occupational Therapy*, 67, no. 6 (2013): 120-130, doi: 10.5014/ajot.2013.008359.
- [7] C. Hocking, "Occupation for public health", *New Zealand Journal of Occupational Therapy*, 60, No. 1 (2013): 33-37, url retrieved from: <https://search.informit-com-au.ezproxy.lib.monash.edu.au/documentSummary;dn=267311161685013;res=IELNZC> ISSN: 1171-0462
- [8] Department of Education and Training. *Scoping study into approaches into student wellbeing* (Australian Government: 2010). https://docs.education.gov.au/system/files/doc/other/appendix_1_literature_review.pdf
- [9] Department of Education and Training. *Teaching and doing* (Australian Government: 2017). <https://www.education.gov.au/teaching-and-learning>
- [10] K. Weare & M. Nind, "Mental health promotion and problem prevention in schools: what does the evidence say?", *Health Promotion International* 26, No.1 (2011): 29-69, doi: 10.1093/heapro/dar075
- [11] E. Bodrova & D. Leong, "Learning and development of preschool children from a Vygotskian perspective," in *Vygotsky's educational theory in cultural context*, eds. A. Kozulin, B. Gindis, V. Ageyev, & S. Miller (New York: Cambridge University Press, 2003), 156-176.
- [12] Bodrova & Leong, "Learning and development of preschool," 162.
- [13] H. Polatajko et al., "Specifying the domain of concern," 23.
- [14] J. Benson, "School-based Occupational Therapy practice: Perceptions and realities of current practice and the role of occupation," *Journal of Occupational Therapy, Schools and Early Intervention*, 6, no.2 (2012): 165-178, doi: 10.1080/19411243.2013.811348.

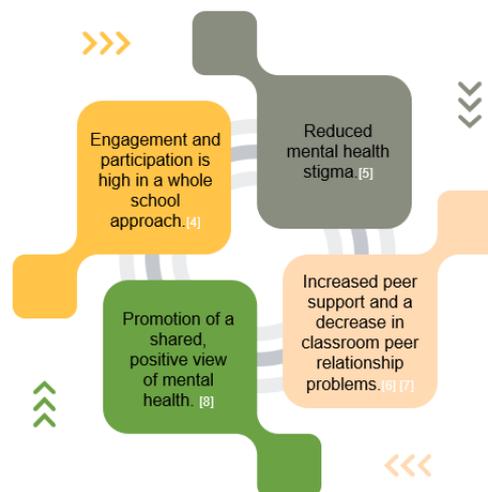
Building Resilience at School

How universal intervention in primary schools can build a culture of resilience.

Universal Intervention in primary education is defined as a program that is applied across a whole school regardless of a child's risk profile.^[1] Whilst this may seem arbitrary or unnecessary for children not displaying mental health problems, it may just hold the key to delivering the best outcomes for childhood mental wellbeing, building a culture of resilience across the school community, as well as being the easiest approach to integrate.^[2]

Universal interventions take a strength-based approach that aims to take advantage of the environment and existing resources, as well as the positive qualities of staff with an intentional approach to promoting health and well-being. It allows for a continuous program reinforced year on year that efficiently promotes a consistent and sustainable approach to resilience and mental health

Advantages of universal intervention include:



Further evidence for school based programs.

Australian children spend 10,710 hours of compulsory instruction at school from prep to year 10, highlighting that Australian children spend the majority of their day at schools and this shapes who they are.^[9]

Schools are the ideal environment to foster positive mental health outcomes in children as it would occur in the child's natural environment ensuring they feel safe and comfortable, trained and knowledgeable educators, effective learning programs for children, parent engagement, a positive learning culture and a physical environment well suited to a variety of engaging activities.

A long-term study that mapped the mental health trajectory of children from primary school to high school concluded that adolescents were more likely to flourish in school and experience good physical and mental health if they had been equipped with coping skills from primary school.[\[10\]](#)

Cefai & Camilleri found that the classroom context is the greatest influence on a child's learning and behaviour due to the relationships formed there and the amount of time shared with peers. They also determined that during primary school years, a child's development is still fluid and taking shape, meaning that school culture has great potential to impact a child's long-term emotional wellbeing.[\[11\]](#)

Promotive factors such as high self-efficacy and self-esteem, focus in the classroom, parental and teacher engagement resulted in positive mental health, in fact, the more of these promotive factors that existed in a child's life, the greater the wellbeing they experienced.



Figure 1: An adolescent isn't likely to experience any mental health issues when five or more protective factors are present in their lives as a child, compared to a 60% chance of mental health issues when there's a lack of wellbeing promotive factors.[\[12\]](#)

Here are some other reasons why the primary school setting is ideal to build resilience:

- Programs incorporated into the classroom and teaching structure have proven greater results than those that sit outside of this setting. This is due to the role that educators already play in building resilience in children and the relationship they hold with children.[\[13\]](#)
- School communities and their families perceive school based programs to be more effective as their children are regularly there. This perception alone provides a significant boost in effectiveness over resilience programs that are run outside of the school setting.[\[14\]](#)
Educators and school staff are already on the frontline providing mental health

support to children, and the education system has a strong focus on resilience as a key outcome of both academic and extra-curricular activities.

- Greater resilience traits demonstrated at the individual level and replicated throughout a majority of the student population will inevitably improve all interpersonal relationships and ultimately the entire school culture.
- As children experience more positive relationships with teachers, staff and their peers, they feel more supported and develop greater capacity for emotional self-regulation.[\[15\]](#)

The Me Tree for Schools was developed for schools based on evidence that schools are considered an optimal environment to foster the skills a child needs to develop resilience and a sense of identity from a young age outside of healthcare as it is a non-threatening, cost-effective and an adaptable setting.[\[16\]](#)

Schools that embrace a wellbeing approach experience a cultural shift, resulting in a sense of connection with the school community.[\[17\]](#) School connectedness is the basis of developing a respectful and healthy relationship-culture which assist with child's mental wellbeing.[\[18\]](#) School connectedness is a feeling of belonging to the school and is associated with positive health and improved academic results.[\[19\]](#) The Me Tree for Schools increases school connectedness through positive teacher-student and peer relationships, and by building social and emotional skills in students.

REFERENCES

- [\[1\]](#) E. Higgins, & S. O'Sullivan, "What works: systematic review of the "FRIENDS for Life" programme as a universal school-based intervention programme for the prevention of child and youth anxiety," *Education Psychology in Practice*, 31, no.1 (2015): 424-438, doi: 0.1080/02667363.2015.1086977.
- [\[2\]](#) J. Aldridge, & K. McChesney, (2018). The relationships between school climate and adolescent mental health and wellbeing: A systematic literature review. *International Journal of Educational Research*, 88, 121-145, doi: 10.1016/j.ijer.2018.01.012.
- [\[3\]](#) M. Fazel et al., "Mental health interventions in schools," *Lancet Psychiatry*, 1, (2014):377-387, doi: 10.1016/S2215-0366(14)70312-8.
- [\[4\]](#) M. Atkins, et al., "Schooling and children's mental health: Realigning resources to reduce disparities and advanced public health," *Annual Review of Clinical Psychology* 13, (2017): 123-147, doi: 10.1146/annurev-clinpsy-032816-045234.
- [\[5\]](#) C. O'Connor, J. Dyson, F. Cowdell, & R. Watson, "Do universal school-based mental health promotion programmes improve the mental health and emotional wellbeing of young people? A literature review," *Journal of Clinical Nursing*, (2017): doi: 10.1111/jocn.14078.
- [\[6\]](#) J.A. Durlak, et al., "The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions," *Child Development*, 82, (2011):405-432, doi: 10.1111/cdev.2011.82.issue-1.
- [\[7\]](#) K. Weare, & M. Nind, "Mental health promotion and problem prevention in schools: what does the evidence say?" *Health Promotion International*, 26, no.1 (2011): 29-69, doi: 10.1093/heapro/dar075.
- [\[8\]](#) Weare, Nind, "Mental health promotion".
- [\[9\]](#) Organisation for Economic Cooperation and Development, *Education at a Glance 2013: OECD Indicators* (2013), url: www.oecd.org/edu/eag.htm.
- [\[10\]](#) C. Cefai, & L. Camilleri, "A health start: promoting mental health and well-being in the early primary school years," *Journal of Emotional and Behavioural Difficulties* 2, (2014): 140, doi: 10.1080/13632752.2014.915493
- [\[11\]](#) Cefai & Camilleri, "A health start," 142.

- [12] Cefai & Camilleri, "A health start," 143.
- [13] A. Sanchez, et al., "The effectiveness of school-based services for elementary-aged children: A meta-analysis," *Journal of the American Academy of Child and Adolescent Psychiatry*, (2017): doi: 10.1016/j.jaac.2017.11.022.
- [14] Sanchez et al., "The effectiveness of".
- [15] A. Williford, et al., "Childrens' engagement within the preschool classromm and their development of self-regulation," *Early Education and Development*, 24, no.2 (2013): 162-187, doi: 10.1080/10409289.2011.628270.
- [16] R. Marks, *Health Literacy and school-based health education* (London: Emerald Publishing Group, 2012).
- [17] J. Bower, C. van Kraayenoord, & A. Carroll, "Building social connectedness in schools: Australian teachers' perspectives," *International Journal of Educational Research* 70, (2015):101-109, doi: 10.1016/j.ijer.2015.02.004.
- [18] P.E. Jose, N. Ryan, & J. Pryor, "Does social connectedness promote a greater sense of well-being in adolescence over time?," *Journal of Research on Adolescence*, 22, no.2 (2012): 235-251, doi: 10.1111/j.1532-7795.2012.00783.x
- [19] J. Oldfield, N. Humphrey, & J. Hebron, "The role of parental and peer attachment relationships and school connectedness in predicting adolescent mental health outcomes," *Child and Adolescent Mental Health*, 21, no.1 (2018):21-29: doi: 10.1111/camh.12108.

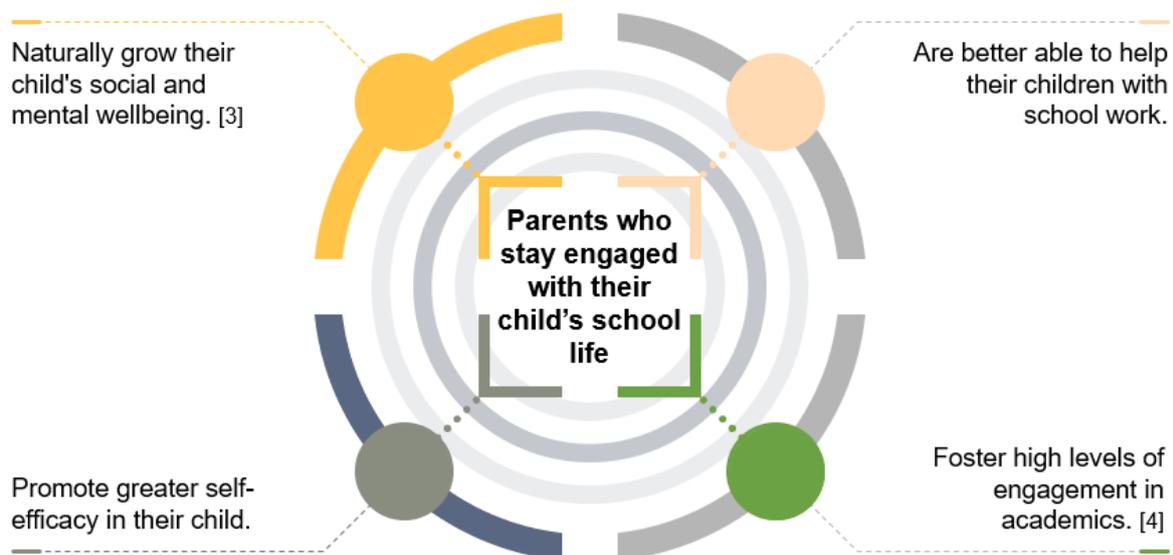
Parent Teacher Partnerships

Parents who stay engaged with educators raise more resilience kids.

Parents play a central role in their child's academic years and it is clear that parents who are actively engaged during the school life of their child see greater outcomes in social, mental, and academic areas of their child's life. [1]

One study saw over 170 adolescents report their perception of their parent's involvement and autonomous support, motivations for engaging in academic workload and ability to control their behaviour. The significant findings revealed that children who perceive their parents were committed and play an active part in their children's day-to-day lives as well as facilitate independent problem solving and choice, were able to self-regulate their behaviour and showed greater intrinsic motivation regarding their academic achievement. Subsequently, this became a predictor of greater academic performance and positive classroom behaviour. [2]

Whilst few would be surprised to learn that parents who collaborate and cooperate with the work of educators raise more resilient and competent children, the evidence is well worth investigating.



Supporting school programs at home

The home is the primary environment where beliefs, values and motivations are established, therefore it is important to foster an open and encouraging atmosphere that will support the messages and activities from the classroom and instill an intrinsic desire to learn. [5] [6]

Negative parent communication, unrealistic expectations, inconsistent behavioural boundaries and lack of parental support can result in poor self-esteem and self-regulation in children. [\[7\]](#) [\[8\]](#)

Aspects of parental involvement that assist with a child's social, emotional and academic development includes the following: [\[9\]](#)



Although direct parental involvement (help with homework and coaching) at home does result in improved grades, indirect parental involvement has been found to have a long-term impact on a child's success in life through improvement in self-belief, engagement skills and motivation of academic competence and wellbeing. [\[11\]](#) [\[12\]](#)

Longitudinal research has shown an association between parental support in their children's lives and a reduced risk of depression. Additionally, support from adult mentors such as education staff was found to reduce depression in these children's lives. [\[13\]](#)

What can a healthy Parent-School partnership achieve?

Parents, teachers and students benefitted from a study in Australia that utilised a 'Learning Together' collaborative approach between teacher and parent to support the wellbeing and resilience of children. Both parents and teachers were able to provide greater insight and new perspectives into the child's strengths and challenges and this collaboration fostered a deeper relationship between all parties as everyone felt connected and invested. [\[14\]](#)

Teachers that provide parents with knowledge and support may increase a child's self-belief or feelings of competence and decrease parental stress and anxiety. Research shows that children benefit when parents are informed, and when they feel supported, efficacious and less stressed. Children experience benefits in the areas of behaviour, mood and learning. [\[15\]](#) [\[16\]](#) [\[17\]](#)

Furthermore, targeted interventions that increase communication and alignment between teacher and parents have been shown to increase student's social skills and academic engagement. [\[18\]](#) It is therefore critical for schools to foster a collaborative and positive

relationship with parents, promoting a sense of belonging and ownership.

The Me Tree for Schools encourages schools to support parents involvement in their children's learning and recognizes the mutual benefits of a healthy school-parent partnership.

The Me Tree for Schools actively encourages parents to engage with the program, school staff and teachers, to extend the activities and learning the child is experiencing during school hours. Parents are provided with an information and training session as well as take home resources.

The evidence is clear, what we've always known about parents being engaged in their child's school life and forming a collaborative relationship with educators is true: your children will be well adjusted, more confident, and will achieve greater academic results.

REFERENCES

- [1] M.T. Wang, & J. Eccles, "Social support matters: Longitudinal effects on social support on three dimensions on school engagement from middle to high school," *Child Development*, 83, no.3 (2012): 877- 895: doi: 10.1111/J.1467-8624.2012.01745.
- [2] M.M. Wong, "Perceptions of Parental Involvement and Autonomy Support: Their Relations with Self-Regulation, Academic Performance, Substance Use and Resilience among Adolescents," *North American Journal of Psychology*, 10, no. 3 (2008): 497-518, url: https://selfdeterminationtheory.org/SDT/documents/2008_Wong_NAJOP.pdf
- [3] S. Fox, & A. Olsen, "*Educational capital: Our Evidence Base Defining Parental Engagement report* , research report prepared for the Department of Education and Training, (Canberra, 2014).
- [4] Wong, "Perceptions of Parental Involvement".
- [5] S. Mulligan, (2014). *Occupational therapy evaluation for children* (Philadelphia, PA: Lippincott Williams & Wilkins, 2014).
- [6] Wong, "Perceptions of Parental Involvement".
- [7] S. Ben-Tov, & S. Romi, 'An interactive model of parents' involvement and their children's functioning in school,' *Education*, 3 no.13 (2018): 1-16, doi: 10.1080/03004279.2018.1428650.
- [8] Fox & Olsen, "Educational capital,"
- [9] Fox & Olsen, "Educational capital,"
- [10] W. Jeynes, "A Meta-Analysis of the Efficacy of Different Types of Parental Involvement Programs for Urban Students. *Urban Education*," 47, no.4 (2012): 706-742, doi: 10.1177/0042085912445643.
- [11] M.T. Wang, & S. Sheikh-Khalil, "Does parental involvement matter for students achievement and mental health in high school," *Child Development*, 85, no.2 (2014): 610-625, doi: 10.1111/cdev.12153.
- [12] W. Fan, & C. Williams, "The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation," *Education Psychology*, 30, no.1 (2009): 53-74, doi: [/10.1080/01443410903353302](https://doi.org/10.1080/01443410903353302).
- [13] A. Eisman et al., "Depressive symptoms, social support and violence exposure amongst urban youth: A longitudinal study of resilience," *Developmental Psychology*," 51, no.9 (2015): 1307-1316, doi: [10.1037/a0039501](https://doi.org/10.1037/a0039501).
- [14] C. Harrison, & H. van Vliet, "Learning together: An innovative parent education project to facilitate children's learning, wellbeing and resilience," *International Research in Early Childhood Graduation*," 4, no.1 (2013): 35-52, url: <https://files.eric.ed.gov/fulltext/EJ1150962.pdf>.
- [15] Harrison & van Vliet, "Learning together".
- [16] Wong, "Perceptions of Parental Involvement".
- [17] J. Bryan, "Fostering Educational Resilience and Achievement in Urban Schools Through School-Family-Community Partnerships," *Professional School Counselling*," 8, no.3 (2005): 219-227, url: <http://www.jstor.org.ezproxy.lib.monash.edu.au/stable/42732462>.
- [18] N. Hill, & D.Tyson, "Parental Involvement in Middle School: A Meta-Analytic Assessment of the Strategies That Promote Achievement," *Developmental Psychology*, 45, no.3 (2009): 740-763, doi: 10.1037/a0015362.

Resilience

Resilience can very simply be described as the ability to cope with adversity.^[1] Whether due to external or internal factors, we all face challenges to our emotional and mental wellbeing. We demonstrate resilience when we are able to manage the stress associated with those challenges over the long term. A child that demonstrates resilience is able to confront, rise above and eventually be strengthened by, adversity.^[2]

A child's ability to be resilient will vary as it is determined by the child's internal traits and the physical and social environments they interact in.^[3] Resilience can, however, develop with time through adverse situations that bring out the best in a child, such as modeling positive attitudes, interacting with adults and using what they've learned to help others.^[4]

Some characteristics of resilience can be taught, such as motivation, adaptability, persistence and social skills.^[5] It is beneficial to support children to develop knowledge and skills in their formative years of life to encourage them to persevere through all perceived adversities such as school, friendship issues, health issues and family breakup.

Why focus on resilience?

Children cannot avoid life stressors, without the appropriate tools to cope with the negative effects of adversity and negative events, a child's learning and development can be affected. Resilient children have been linked with better educational performance and productivity in schools, less behavioural difficulties and in the longer run is associated with better psychological wellbeing.^{[6] [7]}

Resilience is a protective factor against psychological health problems.^[8] It is suggested that children who are unable to cope with stress and do not have the appropriate strategies to process it will be unable to self-regulate appropriate emotions and behaviours.^{[9] [10]} Ng, Ang & Ho applied a resilience characteristics framework to better understand school children's resilience.^[11] Through positive thinking, determination and seeking help, there was a decrease in internalising (depression and anxiety) and externalising (aggression) behaviours expressed by the children. Imparting such skills provided school children with the ability to better regulate their own emotional and mental health.

Resilience in the school environment

Nolan et al. also argue that teachers 'not only teach but model desired dispositions, behaviour and language', highlighting the critical role teachers play in assisting children to develop resilience.^[12] Universal interventions that strengthen children's resilience from primary school have shown positive effects on functioning and emotional health all the way through to early adulthood.

The Seattle Development Project utilised a universal resilience-focused intervention at different stages of primary education (from Year one to six, and another group from Year five to six). Participant's mental health and behaviour was tracked from when they entered the program up until the age of 21. The overall results indicated that participants displayed positive mental health, enhanced school performance, as well as a decreased rate of participation in crime and substance abuse at 21 years of age. The most significant and lasting change at 21 years was observed in those who engaged in the program for a longer time (i.e. from Year 1 to 6 compared to just Year 5 to 6).[\[13\]](#)

Developing resilience in children

It is important that schools and parents collaborate to foster resilience in children. Building upon the natural roles of the parent and the teacher, resilience can be developed through strong self-belief, self-esteem and feeling secure with the caregivers in the environment.[\[14\]](#)

Nolan et al. studied the development of children by developing their capacity for resilience, and worked on building emotional management, along with interpersonal skills such as flexibility, self-worth and stress management.[\[15\]](#)

Whilst individual children may respond differently to different methods for building resilience, here are some examples found by various studies.

- Teachers often provide prompts to assist the child to think through the situation they are facing.
- Using play to build confidence in making choices.

REFERENCES

- [\[1\]](#) K. Archdall, & A. Kilderry, "Supporting children's resilience: Early childhood educator understandings," *Australasian Journal of Early Childhood*, 41, no.3 (2016): 58-65, url: <https://search.informit-com-au.ezproxy.lib.monash.edu.au/fullText;dn=461574408233727;res=IELHSS>
- [\[2\]](#) A. Nolan, A. Taket, & K. Stagnitti, "Supporting resilience in early years classrooms: the role of the teacher," *Teachers and Teaching*, 20, no.5 (2014): doi: <https://doi-org.ezproxy.lib.monash.edu.au/10.1080/13540602.2014.937955>.
- [\[3\]](#) A. Masten, "Global perspective on resilience in children and youth," *Child Development*, 85 no.1 (2014): 6-20, doi: 10.1111/cdev.12205.
- [\[4\]](#) Masten, "Global perspective on," 14.
- [\[5\]](#) Archdall & Kilderry, "Supporting children's resilience," 58.
- [\[6\]](#) N. Khanlou, & R. Wray, "A whole community approach towards child and youth resilience promotion: A review of resilience literature," *International Journal of Mental Health and Addiction*, 12, no.1 (2014): 64-79, doi: 10.1007/s11469-013-9470-1.
- [\[7\]](#) J.A. Durlak, et al., "The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions," *Child Development*, 82, (2011): 405-432, doi:10.1111/cdev.2011.82.issue-1
- [\[8\]](#) A. Eisman, "Depressive symptoms, social support and violence exposure amongst urban youth: A longitudinal study of resilience," *Developmental Psychology*, 51, no.9 (2015): 1307-1316, doi: [10.1037/a0039501](https://doi.org/10.1037/a0039501).

- [9] Archdall & Kilderry, "Supporting children's resilience," 62.
- [10] Durlak et al., "The impact of," 426.
- [11] R. Ng, R. Ang, & M.H.R Ho, "Coping with anxiety, depression, anger and aggression: The meditational role of resilience in adolescents," *Child and Youth Care Forum*, 41, no.6 (2012): 529-546, doi: <https://doi-org.ezproxy.lib.monash.edu.au/10.1007/s10566-012-9182-x>.
- [12] Nolan, Tacket & Stagnitti, "Supporting resilience in,".
- [13] J. Hawkins, et al., "Promoting positive adult functioning through social intervention in childhood," *Archives Paediatric Adolescent Medicine*, 159, no.1 (2005): 25-31. Doi: 10.1001/archpedi.159.1.25.
- [14] S. Prince-Embury, & Saklofske, D. H. *Resilience in Children, Adolescents, and Adults: Translating Research into Practice* (New York, NY: Springer, 2013), 1-349.
- [15] Nolan, Tacket & Stagnitti, "Supporting resilience in,".

Identity

The importance of a child's self-awareness and identity in building resilience

“Who am I?” “Why am I here?” Questions we all articulate at various stages of our teenage and adult lives when grappling with our self-identity. Those who seem to have all the answers are considered much more resilient, confident, and even more successful in their chosen pursuit. So what does a healthy self-awareness and self-identity mean in the life of a child?

Positive self-identity is crucial in the life of a child and the signs of self-awareness can be noticed very early on.^[1] This early development of identity through primary school years is often characterised by a self-perception that is idealistic and generic.^[2] However as they get older this becomes more accurate, unique to the individual, and also negative, largely due to responses to environment as they develop greater capacity for complex insight.^[3]

Identity and Social Skills

The development of a healthy sense of identity is also the cornerstone for social and emotional development as it can determine how a child interacts with their peers.^[4] Identity is formed by interactions in the environment, interactions with significant others and reinforcement of positive behaviour.^[5]

Identity and Academic Achievement

Research in the last several years has strongly indicated a link between positive self-identity, school performance and mental health, demonstrating the importance of reinforcing aspects of identity in formative years.^{[6] [7] [8]}

Parents have long understood the role they play in identity formation, pouring love and affection to develop the emotional intelligence, resilience and self-awareness. Gniewosz et al. went even further in establishing that how a parent perceives their child's academic competence became a significant influence on that child's actual performance and self-perception.^[9]

Teachers also play an important role in developing the self-esteem and identity. It should come as no surprise then to know that any increase in teacher-child interaction has a measurable positive effect on a child's self-identity.^{[10] [11]} This awareness and resilience, cultivated by a child's family and teachers through primary school years, provides the basis upon which students form their thoughts about themselves. Similar to the old proverb, as a child thinks of themselves as being resilient and confident, so follows their behaviours –

they become more adaptable in social situations, attempt new challenges, and perform better at school.

Identity and Stress

According to Diehl & Hay, children with positive self-identity display greater psychological wellbeing and confidence, whereas on the opposite end of the scale those with a more negative self-identity are more 'fragmented' or 'confused' in thought.^[12]

Children with a stronger sense of self-identity are better equipped to understand the events and emotions they are experiencing, even under stress. A study in 2011 found that children who lack a sense of identity, experience greater emotional instability and cope less with stress. Positive identity is a mitigating factor on the stress children experience in their daily life and boosts their mental wellbeing.^[13]

The Me Tree for Schools uses activities aimed at boosting each child's self-awareness relating to their family, their natural abilities, the things they like and their personality. Through the program children will learn to link their thoughts to their attitudes and in turn to their behaviours and identity. Children will develop a positive identity of themselves which has the ability to influence their attitudes and behaviours, providing them with a strong foundation of mental wellbeing.

REFERENCES

- [1] G. Leflot, P. Onghena, & H. Colpin, "Teacher-child interactions: Relations with children's self-concept in second grade," *Infant Child Development* 19, (2010): 385-405. Doi: 10.1002/icd.672.
- [2] A. Wigfield, & J. Eccles, "Expectancy- Value theory of achievement motivation," *Contemporary Education Psychology*, 25, (2000):68-81, doi 10.1006/ceps.1999.1015.
- [3] Wigfield, "Expectancy-Value theory," 75.
- [4] Wigfield, "Expectancy-Value theory,"74.
- [5] Gniewosz, B., Eccles, P., & Noack, J. (2014). Early adolescents' development of academic self-concept and intrinsic task value: The role of contextual feedback," *Journal of Research on Adolescence*, 25, no.3 (2014): 459-473, doi: 10.1111/jora.12140.
- [6] A. Hanley, et al., "Relating dispositional mindfulness, contemplative practice, and positive reappraisal with posttraumatic cognitive coping, stress, and growth," *Psychological Trauma: theory, research, practice, and policy*, 9, no.5 (2017): 526-536, url: <http://psycnet.apa.org/buy/2016-49325-001>
- [7] Gniewosz, "Early adolescents' development," 465.
- [8] T. Ritchie, "Self-concept clarity mediates the relation between stress and subjective well-being," *Self and Identity*, 10 no.4, (2011):493-508, doi: 10.1080/15298868.2010.493066.
- [9] Gniewosz, "Early adolescents' development," 465.
- [10] Leflot, "Teacher-child interactions," 389.
- [11] L. Pesu, J. Viljaranta, & K. Aunola, "The role of parents' and teachers' beliefs in children's self-concept development," *Journal of Applied Developmental Psychology*, 44 (2016): 63-71, doi:10.1016/j.appdev.2016.03.001.
- [12] M. Diehl, & E. Hay, "Self-concept differentiation and self-concept clarity across adulthood: Associations with age and psychological wellbeing," *International Journal Aging and Human Development*, 73 no.2 (2011):125-152: <http://journals.sagepub.com.ezproxy.lib.monash.edu.au/doi/pdf/10.2190/AG.73.2.b>
- [13] Ritchie, "Self-concept clarity," 499.

Physical Activity

Why Schools should incorporate more physical activity to improve children's mental health.

Participation in physical activity is imperative for good health. Active people are less likely to develop a variety of medical conditions compared to inactive people.[\[1\]](#) It is widely accepted that participating in physical activity positively impacts on a person's mental health.[\[2\]](#) [\[3\]](#)

The reality of modern childhood is that sedentary activity has increased and physical activity has decreased, and whilst nobody would argue this is good for children's physical health, the implications are just as real for their mental health and wellbeing.[\[4\]](#) [\[5\]](#) [\[6\]](#) Children who regularly engage in screen based activities not only show increased risk of various physical health issues, but Allen & Vella found that over a two year period they also show *increased worry and isolation*.[\[7\]](#)

Only three in ten Australian children 5 to 17 years old meet the daily physical activity guideline of 60 minutes per day.[\[8\]](#) In fact, between the ages of 2-4 years and 15-17 year age brackets, meeting the daily recommendation for physical activity drops from 72% to just 6%. Healthy behaviour habits such as engaging in physical activity are formed in early childhood and are highly influenced by parents' physical activity behaviour and the school setting.[\[9\]](#) [\[10\]](#) [\[11\]](#)

Physical activity enhances a child's response to stress, giving the child a crucial tool of protection from mental health issues.[\[12\]](#) Furthermore, physical activity builds a child's self-efficacy due to the challenges and discipline it requires.

Studies have shown regular participation in the recommended 60 minutes of physical activity a day reduces symptoms of depression and anxiety.[\[13\]](#) [\[14\]](#) A study conducted by Monshouwer et al. found inactive children were less competent at processing challenges and stress compared to those who engaged in physical activity due to the higher risk of internalising (anxiety and depression) and externalising (anger and frustration) problems.[\[15\]](#)

Incorporating physical activity in schools.

Children spend the majority of their day at school in sedentary activities and therefore it is important to get them moving to improve their capability to learn along with their general health and wellbeing. As the ABS data shows, simply relying on outdoor playtime during scheduled lunch and morning tea breaks does not result in children engaging in the recommended 60 minutes a day of physical activity.[\[16\]](#)

Physical activity has the ability to positively impact a child's life to make them more well-rounded and successful in school. In a thorough investigation of the literature, a review of randomised control trials showed a positive relationship between physical exercise and cognitive abilities, academic achievement and psychological wellbeing.[17]

The crucial element that schools can impart into each child is the 'tools' they need to engage in physical activity. Teaching them the basics of various physical activities and providing the opportunity to engage in enjoyable physical activities has been shown to result in an increase of confidence that changes their own physical activity behaviour (i.e. The child becomes more engaged in physical activity resulting in enjoyment which leads to increased physical activity participation).[18]

Physical activity needs to 'become second nature' to hinder the age associated decline in physical activity observed in adolescents, which can ultimately lead to unhealthy lifelong habits and mental health issues.[19]

The Me Tree for Schools seeks to enable schools to embed physical activity throughout the whole day, keeping children active as a means of improving their overall health and mental wellbeing. The goal of raising more resilient children is made much easier when they are more active throughout the day.

REFERENCES

- [1] R. Eime, et al., "A systematic review of the psychological and social benefits of participation in children and adolescents: Informing development of a conceptual model of health through sport," *International Journal of Behavioural Nutrition and Physical Activity*, 10, no.98 (2013): doi: <https://doi-org.ezproxy.lib.monash.edu.au/10.1186/1479-5868-10-98>.
- [2] G. Arat, & P.W.C.Wong, "The relationship between physical activity and mental health among adolescents in six middle-income countries: A cross-sectional study," *Child and Youth Services*, 38, no.3 (2017): 180-195, doi: <http://dx.doi.org/10.1080/0145935X.2017.1297202>
- [3] N. Hegberg, & E. Tone, "Physical activity and stress resilience: considering those at risk for developing mental health problems," *Mental Health and Physical Activity*, 8, (2015):1-7, doi: <https://doi.org/10.1016/j.mhpa.2014.10.001>.
- [4] M. Allen, & S. Vella, "Screen-based sedentary behaviour and psychosocial wellbeing in children: cross-sectional and longitudinal association," *Mental health and physical activity*, 9, (2015): 41-47, doi: <https://doi.org/10.1016/j.mhpa.2015.10.002>
- [5] State of Victoria, Department of Health and Human Services. (2016). Victoria Public Health and Wellbeing Outcomes. URL retrieved from: <https://www2.health.vic.gov.au/about/health-strategies/public-health-wellbeing-plan>
- [6] M. Whitehead, "The Value of Physical Literacy," *Journal of Sport Science and Physical Education*, 65, (2013): 42-43, url: http://www.icsspe.org/sites/default/files/bulletin65_0.pdf#page=29
- [7] Allen, "Screen-based sedentary," 44.
- [8] Australian Bureau of Statistics, *Australian Health Survey: physical activity 2011–12* (Canberra, 2013).
- [9] E. Schmutz, et al., "Correlates of preschool children's objectively measured physical activity and sedentary behavior: a cross-sectional analysis of the SPLASHY study," *International Journal of Behavioral Nutrition and Physical Activity*, 14, no.1 (2017), url: <https://doi.org/10.1186/s12966-016-0456-9>.
- [10] H. Brown, et al., "Family-based interventions to increase physical activity in children: a systematic review, meta-analysis and realist synthesis," *Obesity Reviews*, 17, no.4 (2016): 345-360, doi: 10.1111/obr.12362.

- [11] A. Hills, D. Dengel, & D. Lubans, "Supporting Public Health Priorities: Recommendations for Physical Education and Physical Activity Promotion in Schools," *Progress in Cardiovascular Diseases*, 57, no.4 (2015): 368-374. url: <http://dx.doi.org/http://dx.doi.org/10.1016/j.pcad.2014.09.010>.
- [12] Hegberg & Tone, "Physical activity and stress".
- [13] Arat, "The relationship between," 188.
- [14] Eime, "A systematic review,".
- [15] K. Monshouwer, et al., "Possible mechanism explaining the association between physical activity and mental health: Findings from the 2001 Dutch Behaviour in School-Aged Children Survey," *Clinical Psychological Science*, 1, no.1 (2013): 67-74, doi: 10.1177/2167702612450485.
- [16] Australian Bureau of Statistics, "Australian Health Survey"
- [17] C. Lee, & J. Hopkins, "Effect of Aerobic exercise on cognition, academic achievement, and psychosocial function in children: A systematic review of randomized controlled trials," *Preventative Chronic Disease*, 10 (2013): doi: [10.5888/pcd10.130010](https://doi.org/10.5888/pcd10.130010).
- [18] Brown, "Family-based interventions," 355.
- [19] Whitehead, "The Value of Physical Literacy".