



Impact Evaluation for the Pause, Breathe, Smile Programme

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for the Mental Health Foundation



Impact Evaluation for the Pause, Breathe, Smile Programme | August 2020
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Executive summary

The Pause, Breathe, Smile (PBS) Programme is strategically important in Aotearoa as it teaches mindfulness skills to students/pupils, teachers and school leaders. Mindfulness is an important dimension to health and wellbeing, with physical, spiritual, social, emotional and cognitive benefits.

Ihi Research undertook an evaluation for the Mental Health Foundation to better understand the effects of the Pause, Breathe, Smile (PBS) programme on school communities. In particular, the evaluation sought to understand the impacts for Māori and non-Māori students, focusing on their learning and behaviour. This included how the use of PBS influenced the development of pro-social behaviours that could enhance classroom climate in ways that prevented and/or reduced student conflict and bullying. It should be noted that PBS is not designed to address bullying, however the programme does aim to improve children's emotional literacy, and this has been noted as important for prosocial behaviour (Boyd & Barwick, 2011).

The evaluation also sought to understand the impacts for teachers and their school communities, as well as unintended consequences of implementation. A further aim of the study was to identify opportunities for ongoing programme improvement. The evaluation utilised a culturally responsive and inclusive methodology through an exploratory sequential mixed-method design that employed qualitative and quantitative data and analyses. The impact framework was developed using Te Whare Tapa Whā, an indigenous model of hauora and wellbeing that is embedded within the PBS programme. The model has four key interrelated pou or dimensions, these are: taha tinana (physical dimensions); taha hinengaro (emotional and cognitive dimensions); taha whānau (social

and relational dimensions); and taha wairua (spiritual and transformative dimensions).

Evaluation results were overwhelmingly positive and emphasised the holistic and interrelated impacts (emotional/cognitive, social/relational, physical and spiritual) that the PBS programme had on Māori and non-Māori students' and especially their learning and behaviour. Results highlighted how the programme strengthened school 'cultures of care', that were more conducive to learning, engagement and wellbeing for culturally diverse students and their teachers and school leaders. Findings indicated these impacts radiated out of classrooms into playgrounds and staffrooms, positively impacting school culture and flowing into whānau/family situations.

Case studies of impact were constructed from interviews at three different schools that had implemented PBS. Interviews highlighted the depth of change. One case study was undertaken in a kura with the majority of children identifying as Māori while two other case studies were undertaken in large urban, culturally diverse schools. Interview themes relating to impact were used in teacher/leader and children surveys to test the generalisability of results. One hundred and forty-three teachers/leaders and 58 children from schools that had participated in the PBS programme took part in these surveys.

Almost all survey findings confirmed interview analysis. Most teachers/leaders who were surveyed indicated PBS had a positive impact for children in their classrooms (98 percent) and that PBS approaches were highly suitable for Māori tamariki and rangatahi (99 percent). The clear majority of children surveyed identified their teachers had been teaching them Pause, Breathe, Smile and mindfulness activities and these had been helpful for them (93 percent).

98%

of teachers and leaders who were surveyed indicated PBS had a positive impact for children in their classrooms.

Comments made by teachers and leaders acknowledged the central importance of Te Whare Tapa Whā providing a culturally inclusive, holistic approach to hauora. In relational to taha hinengaro (emotional and cognitive dimensions) and taha whānau (relationship dimensions), results indicated that the use of PBS enabled Māori and non-Māori students to improve their focus and engagement in learning activities. There were clear emotional, cognitive and relational benefits as a result of engagement in the programme for children and their teachers. Improved emotional literacy, improved relationships and social connections were commonly reported impacts. Analysis highlighted that PBS promoted children's prosocial behaviour and supported conflict resolution within schools. In some schools, teachers and school leaders noticed a marked reduction in bullying and aggressive behaviour.

Through the use of PBS approaches children and their teachers learned to identify their feelings and inquire into the feelings of others. As children learned to open up about how they were feeling, teachers were able to adjust their teaching practices accordingly.

Teachers and school leaders who were surveyed believed the use of PBS activities enabled them to calm their own anxious feelings, particularly in situations they found stressful (98 percent). Similar results were found in the analysis of the children's survey with 93 percent noting PBS activities had enabled them to feel calmer and not worry so much (93 percent). The use of PBS enabled calmer and emotionally safer classrooms and school environments, and these were considered more conducive to teaching and learning.

Māori and non-Māori children reported feeling safer, more peaceful, as well as less anxious and angry. There were reports of increased empathy, friendliness, and concern for others not only in classrooms, but across playgrounds and staffrooms. PBS supported positive social interactions, improved connections and relationships between children and their teachers in ways that enhanced the emotional tone and climate of classrooms. According to research, improving classrooms in such ways is effective for prevention and reduction of bullying behaviours amongst children (Harvey et al., 2016). Evaluation participants also described applying the PBS approaches at home to improve family relationships, which highlighted the way in which benefits flowed out of the school community to wider whānau and family settings.

In relation to taha tinana (physical dimensions) Māori and non-Māori students and their teachers/leaders commented about the physical and cognitive benefits of using PBS approaches. A particular change had been the ability to lower and better monitor stress levels, improve concentration and engagement in learning/teaching tasks, reduce anxiety and get more rest.

In relation to taha tinana (physical dimensions) children and teachers/leaders commented about the physical and cognitive benefits of using PBS approaches, particularly the ability to better monitor stress levels, focus on teaching/learning tasks, reduce anxiety and get more rest.

There were clear relational and social benefits as a result of engagement in the programme for children and their teachers. Analysis highlighted that PBS reduced children's bullying behaviours and supported

conflict resolution within schools. Improved relationships and social connections were emphasised in the data. Children and their teachers learned to identify their feelings and inquire into the feelings of others. Children opened up about their feelings, and teachers were able to adjust their teaching practices accordingly. Improved conflict resolution amongst children was a significant impact according to surveyed teachers and school leaders. There was a reported marked reduction in classroom and playground conflict between children. PBS supported positive social interactions, improved connections and relationships between children and teachers in ways that enhanced the emotional tone and climate of classrooms, so children felt safer and respected. According to research, improving classroom climates in such ways is highly effective in reducing bullying behaviours amongst children (Harvey, Evans, Hill, Henriksen & Bimler, 2016).

In relation to taha wairua (spiritual and transformative dimensions) teachers noted how children had developed more holistic and deeper thinking, becoming more aware of their environments and the connections between living things. Teachers described using PBS approaches along with karakia and waiata to promote more culturally responsive classrooms and deeper spiritual connections. Analysis highlighted the transformative impacts of PBS, particularly for groups of boys indicating that PBS had profound and dramatic effects for some children.

PBS appears to have positively impacted school culture and wider school communities. The majority of teachers and school leaders participating in the study believed the use of PBS approaches had a positive impact on their school culture, noting calmer teaching and learning environments. One kura utilised programme strategies during whānau events to build a deeper sense of connection to whenua and tipuna. Children and teachers described the ways in which they applied PBS strategies at home, reducing conflict between family members and improving communication.

A further objective of this study was to examine 'unintended consequences' as a result of teachers implementing PBS approaches. Two major themes emerged from qualitative analysis. The first was the

very noticeable, positive benefits for boys and the second was how PBS was being used to reduce children's anxiety arising out of the COVID-19 pandemic and associated lockdown restrictions. These findings were confirmed in the teacher/school leader survey. Three quarters of participants noted the use of PBS strategies had supported boys to better describe their feelings and understand the feelings of others. Surveyed teachers/leaders noted the PBS approaches had been useful for promoting wellbeing during COVID-19 lockdown restrictions.

Opportunities for continued strengthening of the programme were investigated. Data analysis indicated teachers and school leaders would like more activities for children from culturally diverse backgrounds, and more practical resources linked to Te Whare Tapa Whā and te ao Māori (the Māori world). Further opportunities for whole-school development and place-based resources that strengthen whānau and community engagement also emerged from data analysis. Strengthening the focus of Te Whare Tapa Whā within the PBS programme is highly recommended. Evaluation results emphasised opportunities to further investigate the impact for boys. Finally, longitudinal research is recommended to investigate the impacts of PBS over the long-term.

In summary, this evaluation builds on previous research that has found PBS makes a vital contribution to learning and general wellbeing within classrooms and school communities. Evaluation findings have emphasised the many positive and interconnected benefits that PBS has on Māori and non-Māori children and particularly boys. Results highlight the benefits for teachers, school leaders and school communities generally. It is important to share the success of the PBS programme with others who are working to improve the health and wellbeing of culturally diverse children and their school communities. Continuation and extension of the PBS programme is highly recommended.

Introduction and background

Pause, Breathe, Smile (PBS) is a programme originally created at the Mental Health Foundation and further developed by the Mindfulness Group, that teaches mindfulness practices across schools in Aotearoa.

The programme is taught to teachers through the PBS educator training pathway that involves online introduction and facilitation to mindfulness practices, through to professional learning and development workshops and annual school membership resources.

PBS is aligned to the New Zealand Curriculum Framework and incorporates Professor Mason Durie's model of Te Whare Tapa Whā. This indigenous model presents a holistic overview of principles essential for hauora (health and wellbeing). There are four key pou or realms of being:

- **taha tinana** (highlighting physical dimensions)
- **taha hinengaro** (highlighting emotional dimensions)
- **taha whānau** (highlighting social dimensions)
- **taha wairua** (highlighting spiritual dimensions)

Te Whare Tapa Whā is included in the New Zealand Health and Physical Education curriculum where Taha Wairua is defined as our spiritual wellbeing and references 'the values and beliefs that determine the way people live, the search for meaning and purpose in life, and personal identity and self-awareness' (Ministry of Education, 2014). From a broader perspective te taha wairua can be used as a term to convey the sense of something that is inherently part of one's essential being (Hindle, Hynds,

Phillips, Rameka, 2015). Te taha hinengaro is often described as thoughts, feelings and emotions. The manifestation of te taha hinengaro is related to mental and emotional wellbeing and is associated with processes of the mind, thoughts, intellect, consciousness, awareness and emotional state. Te taha tinana is generally viewed as physical health and wellbeing and is associated with exercise and healthy eating. Te taha tinana is often referenced as inseparable from the other three pou of Te Whare Tapa Whā. Te taha whānau refers to whakapapa and fostering a sense of connecting and belonging. The idea of whānau goes beyond immediate family to extended family and will often include work colleagues, friends and communities that we belong to as well as people we care about. The Education Review Office (2020) highlights Te Whare Tapa Whā as an important resource for teaching wellbeing in schools.

Through the PBS programme, children and their teachers learn different mindful practices. These include mindful breathing exercises (regulating the nervous system), mindful eating (for example being aware of each bite; paying attention to the sensory experience of eating); mindful movements (a simplified stretching programme); a body scan (noticing each part of the body); mindful walking (noticing each part of the step); a happy heart practice (for developing kindness); and practices for recognising the connection between oneself and the wider environment.

Research suggests that children today suffer from unprecedented levels of stress, resulting in anger, behavioural problems, depression, and anxiety as well as lowered self-esteem and confidence (Mental Health Foundation, 2012; Napoli, Krech & Holley, 2005). Childhood mental health challenges tend to predict adult mental illness (Britton et al., 2014) presenting a clear impetus to develop strategies that foster child wellbeing (Mental Health Foundation, 2012). Within Aotearoa, Rochford (2014) notes the devastating impact that colonisation has had on Māori and on their health (spiritual, physical and mental) as a result of language, culture and land loss. Currently Māori have the worst mental health outcomes of all ethnic groups (Poulton et al., 2020). Suicide rates in Aotearoa are highest for young, Māori males (15–24 years) and there is a need for culturally based mental health programmes that enable tamariki and rangatahi to talk about their feelings and seek support.

Mindfulness is known to have major health benefits for adults, including reducing stress and anxiety, alleviating pain, enhancing emotional regulation, improving sleep patterns, enhancing feelings of happiness or wellbeing (Greenberg & Harris, 2012). Common impacts noted in research studies highlight the interrelated benefits of mindfulness including social, emotional, cognitive and physical benefits (Greenberg & Harris, 2012; Weare, 2012). While it is considered more challenging to ascertain impacts for children (Smith et al., 2012; Black & Fernando, 2014; Zenner, 2014), studies in schools have evidenced positive impacts on teachers' classroom practices as well as improved perceptions of children's behaviour (Black & Fernando, 2014).

It is important to note there are no universally accepted ways of understanding, practising or measuring mindfulness (Tobin, 2018). Mindfulness is perhaps best understood as a holistic human awareness that has physical, spiritual and cognitive dimensions (Tobin, 2018). For example, mindfulness can be a way to access a different type of consciousness "that embraces ethical responsibility in a relational world characterised by holism and forms of stewardship that sustain

harmonious ways of living with others" (Tobin, 2018, p. 4).

Exploring the evidence-base for Pause, Breathe, Smile

Research into mindfulness interventions within schools is in its infancy, however early indications suggest that mindfulness interventions are feasible with children (Black et al., 2009; Burke, 2009; Zenner et al., 2014). Since implementation, the Mental Health Foundation and the Mindfulness Education Group have been gathering evidence related to the impact of Pause, Breathe, Smile in schools.

In 2014 a pilot qualitative study was undertaken (Rix & Bernay, 2014). It found that teachers in primary school classrooms who had implemented the programme noted ongoing improvements in students' wellbeing (calmness and reduced stress), attention, behaviour and compassion for self and others (Rix & Bernay, 2014). The study acknowledged Te Whare Tapa Whā and the connections between the four key pou with practices within PBS. The authors of this study noted that, "When presented in combination with Te Whare Tapa Whā, mindfulness practices may assist with the development of a holistic understanding of wellbeing by providing the opportunity to develop personal resources in the four domains of experience represented by Te Whare Tapa Whā" (Rix & Bernay, 2014, p.206). Although the authors note that "Te Whare Tapa Whā was incorporated as a key element of the programme" (p.208) there was no discussion about how it was incorporated and the difference this made (or not) particularly for Māori students. The findings of the report related to: student engagement, student ability to focus; improved relational skills; increased calm and stress reduction for teachers.

A mixed methods study was conducted on the impact of the PBS programme on 124 primary level students (Bernay et al., 2016).

The report explains how the design of the eight-week PBS programme included Te Whare Tapa Whā (with particular reference to the pou) as an indigenous model of health and wellbeing. The authors of the report note that “Each aspect of our health, physical health, spiritual health, family health and mental health is interconnected” and view this as “a critical aspect of mindfulness” (2016, p.3). The participant demographics noted European, Māori, Pacific and Asian ethnicity in the participating schools. However, the analysis of the data, discussion, conclusion, and recommendations made no reference to culturally responsive practices or impacts specifically for Māori students within the PBS programme. The study looked at general wellbeing and not the impacts of improvements in general wellbeing on things such as academic achievement and attention. Citing their findings, the authors noted the PBS Programme helped children to “become more aware of their thoughts and feelings ... and more adept at managing their emotions in times of stress and within interpersonal relationships” (p.13). While this research examined impacts of the PBS Programme on students, it did not look at the impacts of PBS on teachers or school leaders.

in 2017 Devich et al. compared the implementation of the PBS approaches with an emotional literacy programme. This study indicated that an eight-week locally developed mindfulness-based programme for school children compared favourably with an eight-week emotional literacy programme improving wellbeing among a small cohort of New Zealand children between nine and 11 years. Mindfulness scores significantly increased for the PBS group (Devich et al., 2017).

The three studies highlighted above, have investigated the impacts of the PBS programme mainly on children, whilst one (Rix & Bernay, 2014) noted the benefits for teachers as well. Although there is some acknowledgement of the importance of Te Whare Tapa Whā within the PBS Programme, it has not been used as an impact evaluation framework for determining how the programme affects culturally diverse students, their teachers/school leaders and school cultures. The present evaluation contributes to the evidence-base on the impacts of the PBS Programme.





This research was guided by three research questions:

1. What is the perceived impact of Pause, Breathe, Smile?
 - For Māori and non-Māori students (direct impacts on learning and behaviour, including student conflict, bullying and pro-social relationships)?
 - For teachers and school leaders?
 - For schools?
2. What are the unintended consequences for schools implementing Pause, Breathe, Smile?
3. What opportunities are there to enhance the training and implementation?

Evaluation impact framework

This evaluation sought to better understand the impact of PBS on culturally diverse children, particularly Māori and non-Māori children but also for their teachers and school leaders.

The study also aimed to investigate the impact of PBS on school culture/community and identify any unintended impacts. Finally, this study aimed to highlight opportunities for continuous programme improvement.

The evaluation is largely qualitative in nature, as it asks different stakeholder groups about their perceptions of impact. According to McKeering and Hwang (2018) qualitative studies are largely underutilised in mindfulness research and offer valuable information that could be used to better inform programme implementation. To address this gap, the present evaluation sought to better understand the qualitative impacts of PBS from the perspectives of culturally diverse students (Māori and non-Māori), and from their teachers and school leaders¹.

This report is structured to respond to the following key research questions:

1: What is the perceived impact of Pause, Breathe, Smile?

- For Māori and non-Māori students (direct impacts on learning and behaviour, including student conflict, bullying and pro-social relationships)?
- For teachers and school leaders?
- For schools?

2: What are the unintended consequences for schools implementing Pause, Breathe, Smile?

3: What opportunities are there to enhance the training and implementation?

Te Whare Tapa Whā

The PBS Programme incorporates Professor Mason Durie's model of Te Whare Tapa Whā. This model presents hauora (health and wellbeing) as best represented by a whare with four key pou. This is represented in the following figure (Figure 1). As a whare it presents a holistic overview of principles essential for hauora with four key pou or four realms of being:

- **taha tinana (physical)**
- **taha hinengaro (emotional/cognitive)**
- **taha whānau (social)**
- **taha wairua (spiritual)**

A key objective of this evaluation was to better understand the impacts of PBS on Māori and non-Māori students. This included how it influenced their learning and behaviour, particularly the development of pro-social behaviours that could prevent or reduce conflict and bullying. It is important to view

¹ A full explanation and description of the evaluation methodology is provided in Appendix 1.

bullying and conflict in schools as a socio-ecological issue rather than a problem of individual behaviour (Boyd & Barwick, 2011; ERO, 2019). A socio-ecological approach to bullying means understanding how different environments influence social development (McLaughlin, 2008).

For example, research on bullying prevention has highlighted the importance of safe and inclusive school and classroom contexts, that promote caring, respectful relationships, social inclusion and a valuing of difference (Boyd & Barwick, 2011; ERO, 2019). Culturally safe environments are imperative for student and teacher wellbeing and are dependant on positive and effective learning relationships (Boyd & Barwick, 2011). Pro-social behaviour is characterised as behaving in ways that positively impact on others, emphasising care, concern for others and empathy (Boyd & Barwick, 2011).

In order to address bullying, schools need to develop a 'culture of care' and actively teach social and emotional competencies so that classroom relationships support student learning, engagement and wellbeing (Boyd & Barwick, 2011; ERO, 2019; Macfarlane et al., 2007). Teacher's efforts should be placed on universal approaches, such as teaching social and emotional competencies and conflict resolution to students (Boyd & Barwick, 2011). Safe and caring schools provide opportunities for students to engage in tasks that enhance their self-awareness, interpersonal and social awareness, self-regulation and management, relationship skills, and responsible decision-making (Boyd & Barwick, 2011; ERO, 2019). Despite the need to create culturally safe schools, Māori students are overrepresented in school statistics related to stand-downs and suspensions (Boyd & Barwick, 2011; Macfarlane et al., 2007; Savage et al., 2012). Traditional school behaviour management strategies and systems have not served the needs of Māori students or their whānau as they are not culturally responsive or aligned to kaupapa Māori approaches (Ministry of Education, 2011; Savage et al., 2012).

Holistic approaches to cultural safety within schools that promote student wellbeing, respect for difference and inclusiveness have drawn on Durie's Whare Tapa Whā model of holistic wellbeing (Macfarlane et al., 2007).

In order to ascertain the qualitative impacts of PBS, Te Whare Tapa Whā has been utilised as an impact framework to give guidance in regard to analysing evaluation data (see Figure 1).

Figure 1. Te Whare Tapa Whā

Holistic Development

Hauora-Developing Wellbeing
Te Whare Tapa Whā (house with 4 walls)

Mental/Emotional
(Hinengaro)

**Relationships/
Family**
(Whānau)

Spiritual
(Wairua)

Physical
(Tinana)



Concepts associated with Te Whare Tapa Whā aspire to support the notion of holistic development and learning in schools. The idea of holistic development is articulated in The New Zealand Curriculum Framework (Ministry of Education, 2014) that recognises spirituality as an interconnected element of the whole person. However, this notion of wairua does not sit neatly in educational speech/terminology where teaching, learning and outcomes often need to fit within narrow, tangible and measurable boundaries. When examining mindfulness in schools, particularly through the expression of wairua, the view needs to be broad, limitless, intangible and non-measurable. The expression of the wairua, or the essence of one's being, can be seen through concepts such as presence, imagination, creativity, intuition, and spontaneity (Hindle, Hynds, Phillips & Rameka, 2015).

Within Aotearoa, there are concerns about enduring colonisation and Eurocentric framing of wellness (Heaton, 2015; Higgins & Eden, 2018; Rochford, 2004). These include concerns about erosion of indigenous tribally-based constructs associated with hauora through their appropriation into mainstream education (Higgins & Eden, 2018). Heaton claims that Te Whare Tapa Whā has been "simplistically depicted in New Zealand curricula and literature as a contemporary Māori model of health and that the model needs to be understood beyond curriculum based, simplistic understandings" (2015, p. 164). Heaton talks about the problem of discussing wairua by stating that "within a Eurocentric culture it seems difficult to talk about nuances of spiritual wellbeing as taha wairua and to elaborate on the whare tapa whā discursive formation" (2015, p.170). Reinforcing an ontological and embodied

understanding of the Whare Tapa Whā, Heaton invites educators “to dwell, not to simply reside and to re-inhabit, not to merely occupy the space” (2015, p. 174).

There are significant problems and tensions in measuring impact associated with hauora. Rochford (2004) noted there are some things that cannot be measured. Citing Marsden (1989) Rochford states that “Māori did not distinguish between the mental and physical aspects of health with individuals, communities and the environment” (p. 43). In addition, pre-colonisation there was a focus on whānau and whenua that emphasised a woven interconnection between people and the land based on reciprocity and balance. Citing Marsden (1989) Rochford noted this relationship “is also a reflection of the belief that all things imbued with a physical aspect as well as a spiritual aspect, with all things possessing a mauri, or life force, reflecting its spiritual aspect” (Rochford, 2004, p. 43).

Māori holistic ways of knowing can be explained as the coming together of the mind, body and soul. Marsden (cited in Royal, 2003) distinguishes between the terms ‘mohio’ and ‘marama’ where marama is what we understand and mohio is what we ‘truly know’ from a mind, body and soul (wairua) perspective. Marsden articulated learning through rather than about and uses a metaphor (swallowing the Rehutai) that talks about Tane entering the twelfth heaven and receiving the ‘Baskets of Knowledge.’ In doing so, Tane took a small white stone named Hukatai (sea foam) and a small red stone named Rehutai (sea spray) and put them into his mouth. The ritual of putting them in the mouth symbolised the transition of knowledge or understanding into wisdom. The gesture of swallowing the Rehutai represents knowledge becoming part of one’s essential being. Marsden’s differentiation of marama (understanding) and mohio (an embodied knowing) speaks not only to the difficulty of measuring wairua

but also to the dilemma of separating the four pou of Te Whare Tapa Whā and discussing the data (within the context of this present evaluation) through the separate dimensions (Hinengaro, Wairua, Whānau & Tinana). This is a consideration that we (the authors) are aware of within the context of this study, as we highlight the evaluation results.

Marama is what we understand and mohio is what we ‘truly know’ from a mind, body and soul (wairua) perspective.

Results

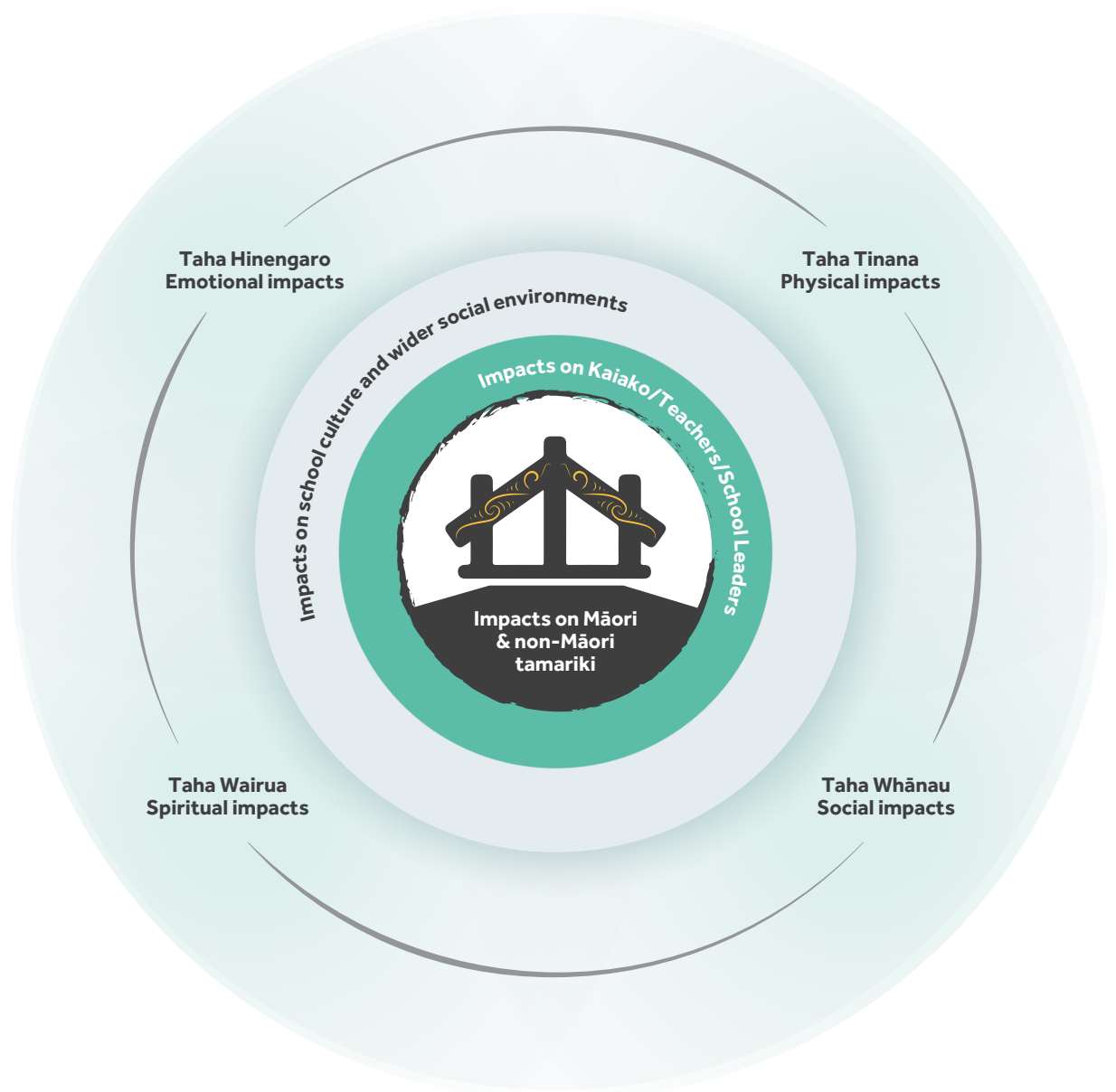
Holistic impact and wellbeing development

This section examines the key findings that emerged from data analysis.

Results emphasised the holistic and interrelated impacts the PBS programme was having on Māori and non-Māori children, their teachers/school leaders and on school communities. Overwhelmingly results emphasised the positive impacts of PBS, that aligned to the four pou key of Te Whare Tapa Whā. Analysis indicated that effects were interrelated and difficult to separate, highlighting emotional/cognitive, physical, social/relational and spiritual impacts for culturally diverse children, their teachers and school leaders. Evaluation results also highlighted how impacts radiated out from the classroom, into the playground and staffroom, impacting school culture and flowing into home situations.

The following figure illustrates the flow of impact aligned to the four pou key of Te Whare Tapa Whā, that will be explored in more depth in the following sections.

Figure 2. Infographic showing interconnectedness of key findings



Results

The following section highlights key results related to the impact of the PBS programme, from the perspectives of Māori and non-Māori children, and their teachers and school leaders. Narratives of impact are provided first. These narratives were developed from interviews with teachers and school leaders as well as interviews and surveys involving Māori and non-Māori children from three case study schools that have implemented the PBS programme. It is important to note the majority of these interviews were planned to be kanohi-ki-te-kanohi, however the timing of the interviews coincided with COVID-19 Level 4 restrictions. Despite this, participants wanted to continue with the interview process to talk about the

considerable impacts PBS was having within their school communities. More information about the process of interviewing and analysing data is provided in Appendix 1.

Case studies

This section presents a series of case studies demonstrating how Pause, Breathe, Smile has been implemented within the school and describing the impact from the perspective of teachers, school leaders and students. Please note the case study schools (and participants) have been given pseudonyms to protect the identity of individual participants, as some disclosed sensitive issues.

Hakituri Kura

Hakituri Kura is a decile 1 school with about 400 students and a predominantly Māori demographic.

The kura is on the East Coast of the North Island and a number of the classes are bilingual. Although the school population is predominantly Māori, 12 percent of tamariki identify as Tongan. Teachers who were interviewed spoke enthusiastically about the many benefits of PBS, while acknowledging initial scepticism towards the programme, doubting that it would have any impact.

"I was sceptical of Pause, Breathe, Smile when it came in. Honestly, I thought, "Oh, here we go. Another initiative to put in place. Another thing to teach, on top of what you're already teaching." (Teacher)

Despite these initial doubts, teachers and school leaders started to see many positive impacts through programme implementation. A noticeable change was the way in which PBS activities improved children's behaviour and general attitudes in the classroom. Tamariki were focussing more on classroom activities, which lead to more engagement and achievement. A reduction in aggressive and bullying playground behaviour was particularly noticeable in the classroom and playground.

"Well, I've seen it improve children's focus, seen the character of the child go from really escalating in terms of violence or aggressiveness and then, after talking about our emotions, we have seen those levels drop down ... we've seen bullying decrease. Yeah." (Teacher)

"It was unexpected ... behaviours going down in the playground in terms of children getting angry or frustrated and getting into

fight in the playground. The extent to which that has declined is massive." (Leader)

Tamariki appeared calmer and were making better choices. They were more patient and had strategies to manage themselves. They were reflecting on and acknowledging their feelings.

Tamariki themselves commented on the impacts.

"It has helped me to feel relaxed and calm."

"It has helped because it has taught me when I'm angry to calm down."

"It's made me feel calmer and made me control myself better."

Teachers noticed the children were kinder and were playing together better, as well as showing more gratitude for the positive things in their lives. Children's communication and emotional literacy improved in conjunction with their ability to talk about their feelings and regulate their own emotions and behaviour. The ability to calm themselves when they felt anxious or uncertain was also noticed.

"We've noticed students are kinder to each other. They show more gratitude for what they have, ... they're using more strategies to manage the way they feel in their ability to get on with their learning task. The other thing I have noticed is they play together better. They are more willing to take turns and they show more patience." (Principal)

"There was a big shift in our children's behaviours and the choices and actions they were making within the kura. And also outside of the kura too and taking it home to their whānau." (Teacher)

An unexpected impact was how positively the PBS programme had impacted on boys. The principal described how PBS had dramatically transformed one boy's behaviour and his ability to talk about issues that were troubling him.

"It got to the point where his parents were taking him to child mental health services. He was being sent home every day. And then we moved him to Ms Tuuta's class and he's just clicked with this mindfulness programme and he's actually now one of the leaders in the classroom. He's the boy who calms other students down. He's the boy who says, 'Come on, let's go for a walk.' That's one example of a 360-degree turnaround." (Principal)

These dramatic changes in children's behaviour were very positive, yet unexpected. Teachers explained that boys were able to use the strategies from PBS to talk about their feelings. This was particularly exemplified by one boy who talked about suicide in his family for the first time.

"In their whānau, they had just gone through some suicidal issues at home ... it brought our boy out to the light to talk more about his family member trying to do that, commit suicide." (Teacher)

Teachers described the way boys were able to communicate their feelings, calm themselves when they were troubled and make better choices.

"This programme helps bring our males back ... brings their hinengaro back into place and their thinking, the choices that they make." (Teacher)

Teachers further explained how the use of PBS strategies and approaches had enabled them to be calmer. They experienced greater awareness of their feelings and emotions as well as those around them. This helped them to be more sensitive to the needs of others.

One teacher explained that PBS helped with his teaching and his parenting skills and he had become a better father and husband.

"I'm more engaged and when I look at my tamariki, who are doing Pause, Breathe, Smile ... I'm learning as well. I'm more aware about how I am feeling, and we talk about this." (Teacher)

The benefits of teachers using PBS were noticeable. There was more awareness of teacher emotions and feelings. Teachers reported feeling calmer and there were less raised voices across the kura.

"The teachers feel their stress levels are lower. They're ... more aware of their colleagues' feelings. The other thing is you don't often hear teachers shouting at students." (Principal)

"I think teachers are more aware of how other teachers are feeling at any current point in time." (Teacher)

"It's made me feel calmer and made me control myself better." - Tamariki

Another unexpected impact was how the use of PBS strategies was helping tamariki to feel calm during COVID-19 lockdown restrictions. Whānau were contacting the kura and sharing examples of how they were using PBS strategies at home.

"We've had parents sending in videos of them doing mindful movement with their children. In one example a parent said, 'Today such-and-such is feeling really anxious about the COVID virus. So, we've decided to go outside and find a quiet place to sit and do some mindful breathing.'" (Principal)

As the school community's confidence in the power of PBS grew, programme strategies were used during community events to strengthen connections and a sense of wairua.

"Whenever we have family events, a school gala, reading evening, Tongan reading evening, kapa haka ... at the beginning we do connect in with our Pause, Breathe, Smile." (Teacher)



In terms of improving the PBS programme, the principal and teachers spoke about how they had already made some adaptations to ensure the programme was authentically place-based and culturally sustaining. The principal saw this happening through means such as integrating karakia, waiata, tikanga, te reo as well as local iwi and hapū narratives. Hakituri Kura was now working towards a whole community approach, with a focus on transforming their behaviour management system to a more culturally authentic and place-based approach that incorporated PBS strategies.

"We've focussed on incorporating PBS as an approach that fits with the local stories and cultures we have in our school. After seeing the positive impacts on our tamariki, we are going to get rid of our current behaviour management system and do something totally different. We're going to use imagery from the Maia narrative to reflect the types of behaviours and qualities we need our children to be modelling and we want to bring Pause, Breathe, Smile into that." (Principal)

The principal felt the programme had contributed to the positive wairua of the school and visitors often commented on this. The community was more aware of the PBS programme and its impact.

"When visitors come to school, they say you can feel the wairua of the school." (Principal)

Teachers expressed their gratitude for the PBS whānau, because of the considerable impacts experienced.

"That Grant and his team are so great ... I really admire how available they are in terms of professional development, sharing resources, trying to get funding to make this a whole programme throughout the school, checking in. All of that sort of thing, I think, yeah, I really want to say a big Māori mihi to him." (Lead teacher)

Rātā School

Rātā School is a decile 10 school. It is a large urban primary school in Auckland that serves a culturally diverse community.

Most children identify as Chinese but there are also many children with Indian heritage. Māori children make up about two percent of the roll, while two percent of learners identify as Pacific and 19 percent as Pākehā/New Zealand European. Approximately 20 percent of the roll are English Language Learners (ELL).

The school is guided by a shared belief that all members of the school community must learn together to develop children's potential, a love of learning and responsible citizenship.

The principal is a passionate believer in the power of the PBS programme and its relevance to his school community. He has seen the benefits first-hand, not just within Rātā School but also at another school, where he was first introduced to the programme. The principal's interest and engagement in PBS grew as he saw positive changes in children's behaviour and engagement in learning. When he moved to take up his new principal position, he could see a need for mindfulness, and staff were open to mindfulness ideas. He was also determined not to stay locked inside an office separated from classrooms. The principal led by example and his enthusiasm helped engage teachers in the PBS programme.

"So, I just said to the staff, 'Look. Please get me out from behind my desk. I want to come into classes and one of the things I can do is teach mindfulness'. And a few teachers took me up on it. So, I did an introductory lesson with the group, just so they could see what it was all about." (Principal)

Teachers' involvement in PBS grew and in 2019 the school organised a professional

development day around the programme.

Teachers reported experiencing noticeable benefits in their classrooms, particularly around increased calmness, caring and a greater acceptance for peers amongst children. Other changes included enhanced concentration and focus that improved children's engagement in learning activities. Other noticeable changes in children included enhanced self-esteem and confidence and a general sense of improved wellbeing.

"It was wonderful! I saw a noticeable difference and particularly that feeling of calmness within the classroom environment ... working through the mindfulness programme with the children, it just reduced their anxiety, particularly if we were trying new things that they were unsure of. They had time to 'just pause, just breathe, just smile' and then move on. It also increased their self-esteem, and their confidence and their focus on specific tasks. I felt it promoted a caring classroom environment." (Teacher)

Learning and using PBS strategies had improved students' self-regulation and ability to calm themselves in stressful situations. Such situations included children's engagement in tests or exams as well as sporting and drama performances.

As teachers taught PBS activities, they noticed how the programme had expanded children's thinking. Through journaling their experiences, children's writing was very insightful and demonstrated they were engaged in deep, holistic thinking.

"I wasn't really sure how useful the journals would be, but you know I was pleasantly surprised by the time we got to the end of it. That last lesson where they're kind of given free rein to write about all the positive and interesting things they've learned, really garnered insightful comments from the children. Really complex and deep thinking and they had obviously taken on a lot more than I had realised, such as seeing the connections in the environment, noticing the bees, the trees and the rain clouds, and how everything kind of connects that holistic thinking. And it wasn't always what I expected, but it was still quite insightful and really interesting to read back just how much they had gained from that." (Teacher)

Improved classroom climates more conducive to learning and engagement was a common impact theme. Using PBS activities, teachers noticed improved student-student and student-teacher relationships. Children were less anxious and there was less fighting and conflict. Classrooms were calmer and more peaceful. Year 3 children who were interviewed described the impact for themselves.

"I was peaceful, and I wasn't concerned anymore." (Tamariki)

"It's about looking after yourself and if you are sad or mad you can make yourself peaceful." (Tamariki)

Teachers observed children being kinder to one another and there was increased empathy for peers.

Teachers linked this to the way the programme had enhanced children's emotional literacy. This reduced conflict and improved peer relationships in the classroom and outside in the playground. Children opened up about their feelings and emotions and teachers learned more about the children and their needs. Through this process teachers learned what was going on for individual children as they became better able to connect and describe their feelings. A particular benefit for teachers was knowing how children were feeling on a daily basis so they could adjust their approaches accordingly.

"I think definitely the children are more able to communicate about their feelings

and emotions. They're more able to put words to their feelings and noticing not just how they are feeling, but how others are feeling. And because they are now talking about how they're feeling it has been quite eye-opening for me. Because when we talk about the colours in the morning and we do our breathing, they're able to tell me how they're feeling that day. They might not have had a good night at home, or they might be feeling a bit sick that day, and it makes me aware so I can kind of adjust how I am with them. So, it really gives me that extra understanding." (Teacher)

Teachers and school leaders were asked about any unexpected consequences, and they immediately described the ways in which PBS approaches had affected boys and improved their ability to communicate their feelings and emotions.

"I have one boy, he really loves the mindfulness work, when we do the breathing exercise - he just really settles and gets into it. And it's enabled me to learn more about what might be going on for him. He's able to talk with me and say, 'Okay, I need to have a few breaths and calm down'. And it's good for him to notice his feelings. And I have another boy, who has trouble separating himself from his mother in the mornings and he can be quite anxious. He'll come up to me and say, 'I'm feeling anxious, my tummy's feeling a bit funny' and he's now able to tell me how he is feeling and seek help instead of acting out." (Teacher)

Another unexpected positive consequence was the ability of children to remain calm during COVID-19 lockdown restrictions. Interviews with Rātā School participants were conducted a day before Aotearoa went into Level 4 lockdown as a result of the COVID-19 pandemic. Teachers talked about deliberately using PBS strategies to calm children prior to the lockdown and reported that children were able to talk openly and this helped to reduce anxiety.

"This morning I did a 'straight back, soft belly' breathing exercise with my class. And there's a lot of anxiety in the community at the moment with the virus. I had 11 children in the class when we usually have 26. The kids all know that something strange is happening and there were a lot of questions, even before I called the roll. Just 'What's happening and why?' and children seeing videos on TV of



toilet paper flying off the shelves, and all this kind of stuff. They're definitely aware. I thought it was quite important to just have that time to calm ourselves down. And just focus on something as simple as breathing. I talked to them about how sometimes in situations like this, it can be really hard to calm your mind and to get rid of all those other thoughts. You might find it harder than you normally would, but that's okay. And so, it reduces anxiety and provides that calmness and peace and that's really relevant at the moment." (Teacher)

All of the teachers interviewed at Rātā School spoke about the impacts for them, both professionally and personally. There was a strong sense of 'ako' – reciprocal teaching and learning as teachers were now learning mindfulness strategies. The programme enabled teachers time to pause and reflect on really important behaviours such as keeping a work-life balance, slowing down thinking, and having a greater awareness of emotions bubbling away beneath the surface. The benefits of the programme were particularly noticed by teachers who described themselves as being 'highly-strung', having anxious thoughts or at risk of burnout.

"I can be quite highly-strung and as a teacher my brain's running a million miles

an hour. But it is in those times when you feel your brain is like a computer with 20 tabs open at once and it's recognising that you just need to stop and clear it and breathe and smile. It's helped me realise it's okay to slow down, and it's helping to minimise that feeling of burnout." (Teacher).

Teachers described significant shifts in their thinking and that engagement in the programme had impacted their understanding of children's emotional needs, including their own children at home.

"I've noticed a huge shift in my thinking, and it's impacted my life in different ways. At school I'm much more aware of things that are impacting on a child and their behaviour. And it's improved my understanding and awareness and feeling that it's okay if a child is not in a great learning space today. And we can just kind of push that to one side and deal with the other things that are going on for them. It's had an impact on my personal life at home too. I have young children myself. So, I'm more aware and more willing to take the time to comfort and support, when my four-year-old is having a meltdown. I am so pleased I took that opportunity to become involved because it's not only the professional impact, it's that personal impact as well that has

really helped me and resonated with me.”
(Teacher)

Having the whole staff involved in the programme developed a sense of kotahitanga (being together as one) where teachers had the space to engage in conversations about what they were doing in classrooms and the impact it was having. Consequently, there was general support for implementing mindfulness practices. Developing a shared, school-wide language and common approaches around PBS was important for supporting children's and teachers' mindfulness. There was excitement expressed about the expectation of continued impacts and benefits as children progressed through the school.

“I was peaceful, and I wasn't concerned anymore”
- Tamariki

“I think because the whole staff are now involved in the programme, it has made a huge difference. It provided us the space to have really valuable conversations, supporting our own mindfulness practices as well as our students' learning. We have developed a shared language and understanding as a school, and I think as the children move through the school, we will see even more benefits and impacts.”
(Teacher)

Teachers cautioned that it took time and practice as well as teacher commitment and modelling in the classroom to see positive impacts. One teacher noted it was important the approaches were school-wide, as children's improved behaviour could easily revert back if teachers were not consistently using the approaches in their classroom.

“One boy, in whom we saw a lot of impact, he would yell at other children and his words and voice were very aggressive and dramatic. He would just get into kids' faces and scream ... he was high on the autistic spectrum and everyone

knew this child. He was a lot quieter that year because he was with a teacher who was really committed to practising the approaches. And he knew he could explain what mindfulness is and could tell you what he was doing. He could tell you what strategies he had, and if he came into a situation which wasn't sitting well with him. And that was really awesome for everyone else to see. And then in the following year when it wasn't continued you could kind of see him almost revert back. It was quite a contrast when he was in a class that was practising it consistently and then not.” (Teacher)

Teachers and school leaders from Rātā School wanted sustainable funding to ensure all children and teachers had access to PSB.

“If I waved my magic wand, I would want the Government to back this programme, so every single student has the opportunity to learn strategies to support them from an early age and then continue throughout their adult life.”
(Teacher)

Rosie Leaf School

Rosie Leaf School is a large, urban primary school in Auckland that serves a culturally diverse community.

Māori children make up six percent of the school population. Most children identify as Indian, followed by children with Pākehā/European heritage. There are also children from Chinese and Middle Eastern communities. Rosie Leaf School is decile 9.

The school has an overarching goal of fostering wellbeing and is concerned that all members of the school community flourish in ways that enable them to achieve their potential. Three school leaders participated in this focus group interview. They explained the school has a history of examining evidence-based and research-based programmes that demonstrate positive impacts for children and teachers.

These leaders became involved in PBS because they had been witnessing an increase in children's anxiety and an acting out of troubling behaviours. They wanted to find a way of reducing this by providing the children with specific tools to enhance their wellbeing. School leaders envisioned PBS would have an impact on the students and the wider school community and whānau/family.

"We were seeing rising levels of anxiety in children, for a variety of different reasons. We weren't psychologists so we looked for a programme that would give children tools that would help them, tools the teachers could use, and tools that could be used beyond, into the whānau and into the community." (School leader)

"We did lots of research into different programmes, but Pause, Breathe, Smile

was what we felt best suited our needs as a school." (School leader)

The leaders had heard positive feedback about Pause, Breathe, Smile from other local schools. An important consideration was the programme had been developed and trialled in a New Zealand context and was supported by the Mental Health Foundation. The programme fitted well with the school values and practices of manaaki (cherish, nurture and sustain), something the leaders were responsible for promoting within each of their teams.

Although each leader was keen to explore PBS, they acknowledged some initial scepticism. Consequently, the three leaders undertook collaborative inquiry to implement the programme into their own teaching practices and then ascertain its impact on children and their classrooms generally. They enrolled in the programme and then implemented it together over a year. Through their inquiry they adapted the programme and made additional resources that responded to their own children's needs. This approach demonstrated the desire of the team to lead by example so they could talk with authority to other teachers in the school about PBS.

"If it was going to have any credibility it was important, we demonstrate to other teachers that it could work, and with very young children as well." (School leader)

"Ms Smith adapted it for her Year O, 1 and 2 learners, I was doing it for years 3 and 4. And Ms Harold was doing it for years 5 and 6. And we managed to see how this went at

different age groups across the school over four terms. And that was really good for us to actually teach and to see if there were going to be any hiccups. We developed our own PowerPoints, and we adapted the material for our age groups. The following year when we introduced it to the whole staff, we were talking about something we really did know about, and we were able to then provide our PowerPoints and our experiences for them to springboard off as well.” (School leader)

“We’ve proven to other teachers through our trials that it could be done, we did it for a whole year. So, teachers knew, ‘Hello this can work in the classroom, I need to take it on board.’” (School leader)

There were different impacts for different children. Similar to the other case study schools, teachers and leaders discovered PBS strategies were culturally responsive and inclusive, for Māori and non-Māori students. In addition, similar to the other schools, these leaders felt the use of PBS strategies had made a real difference for boys. One leader wondered whether this was because the programme expanded children’s knowledge of the biology of the brain and brain function. Something that had captured the boys’ attention and interest.

“In terms of impacts, the one that stood out really fabulously for me was the boys, more so than the girls. They were very interested in the biology of how the brain works. And they could recall the vagus nerve and all those things, they found that kind of information really engaging.” (School leader)

A common impact was children were now recognising the importance of self-control and self-regulation, taking time to reflect on their feelings and situations. This meant children were making better choices in stressful situations.

“We spent a lot of time talking around the amygdala and the prefrontal cortex and those sorts of things. And the children would talk to you and say things like, ‘I’m out of control because my amygdala has taken over. I need to breathe and make some good choices, I need to give myself time.’” (School leader)

A related, noticeable impact was how children’s emotional literacy developed and expanded because of the programme.

Children were interested in talking about their feelings and emotions and how they were using the strategies at home. Children were also giving themselves time and through reflection and practise were more aware of their feelings and those of others. Through practising daily, children were better able to calm themselves, particularly in times of stress and conflict. Children (even very young children) were reflective about the programme and were able to articulate in their own words impacts of the programme at school and home.

“Pause, Breathe, Smile helps you calm back down if something bad happens.” (Student)

“Pause, Breathe, Smile helps you drop your anger when you’re angry.” (Student)

“Sometimes I’m so overwhelmed at home and I just do Pause, Breathe, Smile to calm myself down. Because I get annoyed with my older brothers and my little sister, I just do Pause, Breathe, Smile in my room and then I come out calm.” (Student)

Children were now using the language of Pause, Breathe, Smile and were aware of approaches that could control behavioural impulses.

“As we progressed, a lot of them could develop the language for expressing how they were feeling. I could see the language grow through the programme. I found the little five-and-a-half-year-olds would come back to me and talk to me about the programme, if they saw me in the playground or outside classes, they would talk to me about Pause, Breathe, Smile and how they were doing it at home, and how they were explaining it to their parents.” (School leader)

The leaders agreed there were many interrelated benefits as a result of engagement in PBS. These included social, cognitive and physical benefits for children and particularly children’s emotional literacy, reduction of conflict and improved student self-regulation. Another positive change was how the programme worked to include a wider environmental awareness and connection with whenua and whānau.

While the PBS programme had positive impacts for children, the leaders were eager to highlight interrelated personal and professional benefits.

“And teachers, they can actually see some personal benefits as well. So, it’s not just about the children, it is bigger than that.” (School leader)

There was increased understanding of how teachers and leaders could work constructively in stressful situations, particularly with children with high and complex needs. They were now focussing on their own behaviours and responses in stressful situations. By learning PBS strategies teachers were better able to self-regulate their own behaviour and respond rather than react.

“Some children have very high needs and complex behaviours and PBS has helped the staff understand how those children can escalate so rapidly. So it’s built a platform of knowledge for teachers, and we are having conversations around how that child may react, and why they may react that way, and it’s got a bit of a platform around how they should react as an adult. When the child is spinning out, how teachers need to then access their brain and say, ‘Okay calm down. I need to breathe, let me walk away, let me employ those strategies,’ even though the child is spinning out. It’s about understanding and responding rather than reacting.” (School leader)

Another noticeable change was improved school culture because of teacher/leaders commitment to the programme. Changes were observed within classrooms and within the staffroom. For example, PBS approaches were used in staff meetings. The principle of ako (reciprocal teaching and learning) was evident as leaders believed their involvement in PBS had impacted positively on their own leadership practices. The language of PBS became internalised and embodied.

“We now have a school culture where we start our staff meetings with some mindfulness practise. That’s a really obvious way we can see the school-wide commitment to it. In terms of our own leadership practices, just as the children are using the vocabulary, I think in my head you start to internalise some of those thought patterns and that vocabulary. And you can monitor yourself, and you start using some of the PBS language.” (School leader)

Over time, teacher ownership and commitment to the programme developed. A noticeable change was the development of a shared language and common approach across the school community.

“I think that first year, 2018, was a big learning time for us. It was important for teachers to have ownership of the programme and they adapted the programme to suit their needs. We started to develop a common language across the school.” (School leader)

Children were also adapting the programme and coming up with their own hand signals and visuals, which appears to be indicative of an embodied approach to indicate ‘Pause, Breathe, Smile’. Children reported to teachers they were using the strategies at home to calm parents when necessary.

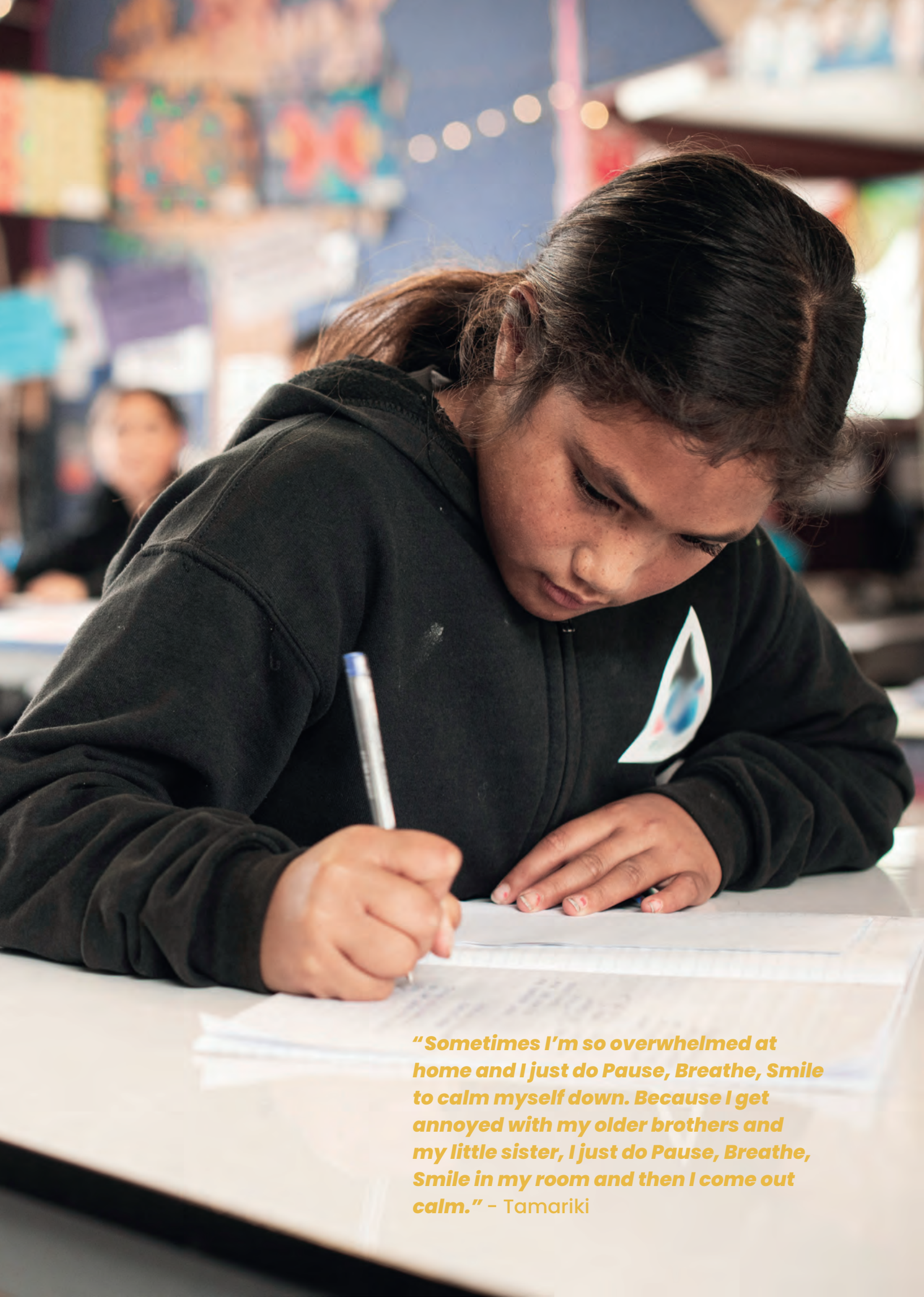
“Some children came up with a visual (hand signals) they made which is, Pause, Breathe, Smile. And so, you could go like this to the children without speaking. And they would all know what you were talking about. So, the kids brought in the visuals. And some of the children were reporting to me that they were instructing their parents in Pause, Breathe, Smile, supporting them when they were angry at home.” (School leader)

Like the other case studies, school leaders explained it took time, whole school commitment and practise to see results.

“One of the things we noticed is that it takes time. At the beginning, when you were starting into the meditation pieces, focussed on breathing, some of our children found it difficult. Especially some of our children with ADHD, it was really difficult for them. But over time you would see that instead of having 10 percent of the class really engaged in that time, and wondering about what was happening with everybody else, it would become 10 percent who weren’t engaged. So, there was a big difference over time.” (School leader)

All three leaders were enthusiastic about the Pause, Breathe, Smile Programme and believed more needed to be done to expand and sustain it.

“It’s really about the sustainability of the programme. It’s such a great programme, it needs to be spread across New Zealand.” (School leader)



"Sometimes I'm so overwhelmed at home and I just do Pause, Breathe, Smile to calm myself down. Because I get annoyed with my older brothers and my little sister, I just do Pause, Breathe, Smile in my room and then I come out calm." - Tamariki

Key interview and survey findings

Findings from case study interviews were developed into two surveys, a teacher/school leader survey and a children's survey. This enabled the research team to test the generalisability of emerging themes related to impact, unexpected consequences and opportunities to further strengthen programme development.

Ninety five percent of children surveyed identified that their teachers had been teaching them PBS and mindfulness activities and the clear majority believed these had been helpful for them (93 percent).

Close to 100 percent of teachers/leaders who were surveyed indicated PBS had a positive impact for children in their classrooms (98 percent).

Almost 100 percent of teachers/leaders who were surveyed believed PBS approaches were suitable for Māori tamariki and rangatahi (99 percent).

Most teachers/leaders surveyed believed PBS had a positive impact for them, citing both professional and personal benefits (97 percent).

Ninety four percent of teachers/leaders surveyed believed the PBS activities had improved their knowledge of mindfulness and mindful practice and 81 percent felt the programme had improved their understanding of the importance of children's social and emotional skills.

Eighty seven percent of teachers and leaders surveyed believed the use of PBS approaches has had a positive impact on their school culture, with 89 percent noting it had created a calmer environment for children.

Teachers and school leaders commented on the positive contributions PBS had made, particularly in conjunction with other complementary programmes.

"PBS is used in conjunction with PB4L at my school. Together they have definitely had an effect but it's harder to know the success of one without the other." (Teacher/school leader survey comment)

"We also do Positive Behaviour for Learning and Mana Potential, PBS supports these other programmes." (Teacher/school leader survey comment)

When considering the following findings, it should be noted the majority of teacher/school leader survey respondents identified they work with students with special needs, such as special learning needs or social, emotional, behaviour needs or both (69 percent). In addition, survey respondents were asked to identify the sources of evidence drawn on when answering impact questions. Classroom observations were most noted (72 percent) coupled with observing improved relationships with children (67 percent) and feedback from whānau, parents/caregivers (45 percent).

Key impacts associated with Te Whare Tapa Whā

Te Whare Tapa Whā was used as the overarching evaluation framework to investigate further into the impacts for Māori and non-Māori children, their teachers/school leaders and the extent to which it affected school cultures and wider communities. Specific findings related to impact are considered in relation to each of the pou (Taha Whānau, Taha Hinengaro, Taha Wairua and Taha Tinana) and are explored in the following sections. It is important to note the holistic nature of these impacts, as data analysis demonstrated that specific changes could align to more than one pou.

Impacts related to Taha Hinengaro

Taha Hinengaro refers to cognitive and emotional impacts. Evaluation findings highlighted the many, varied impacts for children as well as their teachers and school leaders. Importantly, analysis highlighted the majority of children surveyed believed the use of PBS activities had enabled them to feel calmer (93 percent), and the use of PBS approaches had helped them not to worry so much (83 percent). Survey and interview comments by children emphasised the cognitive and emotional impacts through the use of PBS strategies.

"I've learned that sometimes you can have big problems but when you do Pause, Breathe, Smile, you can calm yourself down." (Student)

"... it's helpful and keeps you calm if you're angry." (Student)

"It makes me more thoughtful in many different ways. Makes me more relaxed." (Student)

An important impact was how children's use of PBS strategies had improved their concentration and focus on learning. Their improved ability to calm themselves in stressful situations (particularly during tests), was noticed by these children.

"I like Pause, Breathe, Smile because you can use it to fight off stress, and that can be really helpful in a test or most situations." (Student)

"A couple of weeks ago I had a math test and it was quite hard. It was like dividing fractions and converting them to decimals. I forgot everything I knew. I just took 10 deep breaths, and I kept calm. I would breathe slowly in and out when I took the test. I didn't think about how long it was, how hard it was. I just kept doing it." (Student)

These impacts were confirmed through survey results, as the majority of teachers/school leaders believed the use of PBS had helped students to manage anxieties about learning (86 percent) and the use of PBS had helped to focus children in the classroom (83 percent). In addition, many teachers/

school leaders believed the use of PBS had improved children's concentration in the classroom (74 percent). Improved mind-body connections were noted as PBS helped children re-focus attention and calm frayed nerves. This was beneficial for children who were involved in stage performances and/or sporting or academic competitions.

Calmer and emotionally safer classrooms were considered much more conducive to learning by teachers and children.

"Because we use mindfulness we don't have big scenes in the classroom anymore. Before we did Pause, Breathe, Smile, it happened a lot. It is better now, because everyone is calmer and we don't use big voices." (Student)

A specific change was how the use of PBS strategies improved children and teachers' emotional literacy. The majority of teachers/school leaders surveyed believed the use of PBS approaches had enabled them to improve the social emotional environment of classrooms (90 percent). Positive changes in classroom climate were noticed by the children and their teachers.

"It's actually made a difference for our classroom. We're not so loud and frustrated any more. We're calmer and quieter. The teacher also participates. She rings the bell, and she lies down or sits up with all of us and does the mindfulness. So, she's not so intense when she has to tell us off, and she's not so annoyed." (Student)

Improved emotional literacy was an important benefit because of teachers implementing PBS approaches within their classrooms. These findings were confirmed in survey analysis as the clear majority of teacher/school leader respondents believed the use of PBS activities had increased the ability of children to describe their emotions (87 percent). Teachers/school leaders also identified the use of PBS activities helped children understand other children's feelings (86 percent). PBS activities had improved teacher/school leader understanding of the importance of children's social/emotional skills (81 percent) and the use of PBS had enabled them to learn more about their students' feelings (82 percent).

Emotional and cognitive benefits were not confined to children. Teachers and school leaders also described the many personal and professional impacts of using PBS approaches, with a specific change being an improved ability to become calm and deal better with stress.

"I have a better knowledge of the impact of stress on my body, and ability to self-regulate that. I lead a mindful meditation prior to every staff meeting." (Teacher)

"Being able to just calm down and believe and trust my students to do the right thing to manage themselves. Pause, Breathe, Smile has helped me a lot." (Teacher)

Analysis of teacher/leader surveys confirmed these impacts. For example, 98 percent of surveyed teachers and school leaders believed that through the PBS programme they had learnt skills to calm their own anxious feelings. In addition the majority of teachers/leaders surveyed believed the use of PBS strategies had helped them inquire into the feelings of others (73 percent) and that PBS approaches had enabled teachers/leaders to better express their feelings at school (66 percent).

Evaluation findings highlighted that the use of PBS strategies in the classroom positively impacted Māori and non-Māori children, their teachers and school leaders, positively impacting the wider school environment and community. This was emphasised in participants' comments.

"All staff at my school are involved in Pause, Breathe, Smile PD, and because of this it provided valuable conversations with colleagues to support our classroom programmes, school environment and the students' learning. This has had a positive effect on everyone." (Teacher)

Impacts related to Taha Tinana

Taha Tinana refers to the physical state of being. Children who were interviewed could articulate when and how they used PBS approaches and the immediate physical impacts felt.

"I was playing basketball and it got really bad because the people weren't playing properly, and I was getting mad, but then I just walked off and started doing mindfulness. I just sat in the corner and started breathing.... So, my heart rate started to go down a little bit, and it just helped me to focus a little bit more." (Student)

Such findings were backed up through analysis of children's surveys which highlighted clear physical benefits as the majority of children indicated they felt better inside as a result of using the PBS approaches (81 percent), and their use of PBS strategies had helped them get more rest (74 percent).

During interviews, children used the language of PBS strategies, they could articulate the different approaches learned and the effects these had. This indicates students had acquired new language and skills through the programme.

"Straight back and soft tummy. It's like when you're laughing. So, you're not all stiff when you're sitting up. So, you have a soft belly.... It helps you to be calmer. So not as stiff and a little bit easier, you're not so tense." (Student)

"The mindful eating is when we observe, smell, use all of our senses with the food. It makes you feel like you've learned something new. Like how it smells, because you wouldn't normally smell it. You learn to really taste it because otherwise you just throw it in your mouth straight away." (Student)

"We have gratefulness diaries, so every day we write three things we're grateful for and we don't write the same thing every day. We have to write something, the small things that you appreciate, it lets you express what you're actually feeling grateful for." (Student)

Teachers and school leaders noticed how the PBS programme educated children about the connections between their minds and their bodily responses. Children were now using specific vocabulary which demonstrated their ownership of strategies.

"I think initially I saw the biggest changes in the children's vocabulary and the knowledge they had around how their bodies worked. For example, the children I worked with were really taken with the idea of this upstairs/downstairs brain, and that you had a chance to drop an anchor before you were going from the green zone up to the red zone. And they totally hooked into those ideas and that vocabulary came out." (School leader)

Children who were interviewed were interested in how their brains worked and noted that PBS had taught them more about their mind-body connections.

"I like Pause, Breathe, Smile because it calms down your vagus nerve." (Student)

These results were confirmed through the teacher/leader survey as respondents believed PBS activities had improved their knowledge of the brain and brain function (82 percent). School leaders noted children's use of PBS language in the classroom or wider school environment, indicating teachers had witnessed the transition of skills from PBS sessions into the school environment.

"Being in senior leadership, we sometimes have to deal with children when things have gone wrong in the playground. I started having conversations with my Year 3 and 4 students who I knew had been in classes where they'd been taught PBS, and definitely that language was coming through, 'I should have used my breathing as a strategy', or 'I didn't drop my anchor,' and that was really noticeable." (School leader)

School leaders acknowledged they were using new language acquired from PBS. This demonstrates the role of the teachers and school leaders in modelling and affirming the use of PBS strategies to children.

"Yes, I have found myself saying, 'Hey, I need to drop my anchor here, or I'm starting to do this'.... So just being aware of how you're being in any situation." (School leader)

Evaluation findings emphasised the physical benefits for teachers and school leaders through their use of PBS approaches, and particularly the ability to monitor and better regulate their own stress levels.

“Children have noticed I am calmer!”
(Teacher)

Teachers and school leaders noted personal impacts, including better sleeping patterns which meant they were feeling more rested and better able to notice and appreciate things around them.

“It has helped me appreciate the little things around me that often go unnoticed due to our pace of life. Breathing patterns also help me sleep better.” (Teacher)

“A change for me is being able to stop and notice things in the moment. Breathe and stay calm during stressful times.” (School leader)

Analysis of teacher/school leader surveys confirmed these benefits and impacts, as respondents believed the use of PBS activities improved their overall feelings of wellbeing (83 percent). Analysis highlighted these positive impacts benefitted wider school communities and improved school culture.

Impacts related to Taha Wairua

Taha Wairua refers to the spiritual impacts and transformative effects that changed the nature of participants' being. Comments made by teachers and school leaders highlighted how transformative PBS had been for particular children, as well as in their own lives.

“Life changing, thank you! I now draw on it daily and when life gets a bit bumpy.”
(Teacher/leader survey comment)

“I know it's had a major impact on me.”
(Teacher)

Data analysis highlighted many examples of transformation in the way children were behaving within classrooms and playgrounds. For example, there was a marked reduction in children's aggressive behaviour and in conflict incidents. Teachers reported a reduction in bullying behaviours

evident in some children. These findings were confirmed in survey analysis as the majority of surveyed teachers/leaders believed the use of PBS strategies had reduced the level of conflict in classrooms (68 percent), and PBS supported conflict resolution between children (73 percent). The use of PBS had a transformative effect on children's aggressive behaviour as the use of PBS approaches had reduced bullying behaviours by some children (56 percent) and had reduced the level of conflict in the playground (51 percent). This impact was particularly noticeable as children moved to other schools. The use of PBS complemented restorative justice practices.

“I have had feedback from other schools our students move to, saying that out of all the children from the contributing schools, ours showed an ability to do their own conflict resolution and they stood out from others. I put this down to our PBS programme and focus on restorative practices.” (Teacher/leader survey comment)

Data analysis highlighted that by using PBS approaches children had gained a greater awareness and closer personal connections with the whenua/environment. This finding was confirmed through analysis of children's surveys, as the majority believed the use of PBS approaches had enabled them to be more aware of their environment (59 percent).

Teachers commented about the central importance of Te Whare Tapa Whā and that the spiritual dimension was essential for a culturally responsive approach, something children enjoyed learning about.

“These are very Māori concepts – connecting to environment and self, hikitia te hā – connecting to atua, the hā/breath is the basis for everything Māori. Children enjoyed learning about Te Whare Tapa Whā and how it interconnects.” (Teacher)

“We use karakia, whakataukī and te reo already in our class which really supports the PBS programme.” (Teacher)

Analysis indicated some teachers had made adjustments, so their use of the PBS programme linked better with spiritual practices relevant to te ao Māori.

“I have utilised additional human and digital resources to deepen an understanding of

the place this plays in te ao Māori, along with using te reo to deliver some of the mindfulness practices. In traditional Māori practices Pause, Breathe, Smile has a place in mau rākau and mauri ora.” (Teacher)

“Basic instructions are given in te reo Māori. Instead of a bell we will listen to a kōauau in the background. We use breathing techniques before we sing our waiata. This has had a positive impact on my students. Again, it is making connections with who they are and explaining to them why we do the things we do in te ao Māori.” (Teacher)

Impacts related to Taha Whānau

Taha Whānau relates to the social and relational aspects of hauora. It is centred on the notion of whānau and whanaungatanga rippling out from classrooms, to playgrounds, staffrooms, wider school environments including home and whānau settings. Tamariki commented on the changes they had seen.

“I have noticed people are a little quieter in the classroom and less angry and we can share our feelings.” (Student)

“I have noticed some changes. One for me is that people are more relaxed during work time.” (Student)

“I think in our classroom everyone seems to have more self-control.” (Student)

“I realised a lot of people in my class have been happier, calmer and kinder.” (Student)

Some teachers talked about enhancing their classroom climate through the use of PBS, incorporating te reo Māori and building an atmosphere of belonging and connectedness through mindfulness.

“I often use te reo when I’m taking students through the PBS strategies. Also, I was interested in how to help students from a collectivistic background feel that I wasn’t limiting their connections to others during mindful practises. So I set up sessions with a lot of conversation about how we’re connected in the moment of engaging in mindfulness together, without needing to look at each other and smile and talk, but

the activity isn’t an exclusive one because we’re all creating an atmosphere together of being in the moment and connected, not disconnected.” (Teacher)

Findings related to improved relationships, enhanced connectedness and belonging in classrooms were backed up through an analysis of teacher/leader surveys. There was greater communication and emotional literacy that helped children and teachers to better relate and understand each other. The majority of surveyed children believed the use of PBS approaches helped them to be kinder to one another (72 percent), and helped them become a better friend (67 percent).

Analysis of teacher/leader surveys confirmed these results as the majority of respondents believed using PBS supported positive social interactions between children (87 percent) and PBS activities had supported children to develop their social skills (88 percent). Teachers/leaders also noted the use of PBS activities had supported friendships between children (75 percent).

Many teachers and school leaders believed children were taking their PBS strategies and approaches home, and these were having positive impacts. This illustrates how impact flowed from classrooms and into home and whānau situations.

“Children are taking their knowledge and skills home and sharing them with their whānau, encouraging them to use some of the strategies.” (Teacher)

“I do hear from my families, the practices that the kids take home with them, so even if that’s mindful eating, encouraging the family to do that in the evenings.” (School leader)

“Children have been reporting to me that they are instructing their parents in Pause, Breathe, Smile, supporting them when they were angry.” (School leader)

Students acknowledged how they were using the strategies at home and at school.

“I have been doing mindfulness at home and at school. It has helped because it has taught me to calm down when I am angry.” (Student)

"I have found more ways to relax when (most of the time my brother causes it) I feel negative emotions and I pay more attention to my surroundings." (Student)

Evaluation findings highlighted the positive impacts from PBS were filtering into participant's own personal lives and influencing whānau/family situations as the use of PBS approaches had improved their ability to deal with stress and be a better communicator and family member at home. This finding was backed up through analysis of the teacher/leader survey as the majority of respondents believed the use of PBS helped them remain calm in stressful situations at home (69 percent).

Comments made by teachers emphasised these personal and relational impacts.

"Pause, Breathe, Smile has made me realise the importance of having a healthy balance of family and professional life. I value, even more, the time I spend with colleagues, friends and family." (Teacher)

"I am calmer, more self-aware of feelings, I have more empathy for my kids at home." (Teacher/leader survey comment).

PBS appears to have positively impacted school culture. Teachers and school leaders indicated the programme reinforced important school values to students (85 percent). In addition, the majority of survey participants believed PBS supported a more positive, whole school tone (82 percent). Teachers and school leaders believed the use of PBS activities aligned their practice to school values (80 percent), and the use of PBS had demonstrated to whānau/families their school values in action (70 percent).

Comments made by teachers, leaders and children highlighted impacts and benefits across the school community.

"I have noticed that when people at my school do mindfulness they become calmer." (Student)

"Mindfulness is a key part in wellbeing. We are becoming aware of how vital that is for both our staff and our students." (School leader)

"We don't seem to have as many concerns from parents. They know we are putting strategies in place to support children in

dealing with anxieties. We have a school roll of 720 and I could count on one hand the concerns from parents this year. I think that is remarkable." (School leader)

Teachers and school leaders highlighted the importance of a whole-school approach and developing a common language around PBS and mindfulness. Teachers/leaders believed PBS had encouraged them to share ideas on how to improve mindfulness in their classrooms (79 percent).

"Using PBS throughout the school means we can all talk about behaviours, students and activities with knowledge and understanding." (Teacher/leader survey comment)

"PBS has had a positive impact at our school and given us all a common language to talk about feelings and behaviours." (Teacher/leader survey comment)

Itinerant or resource teachers (such as RTLB) commented on the importance of whole school commitment and teachers' ownership of the programme, noting that impact hinged on this.

"The impact differs from school to school, if you have the buy-in it is great." (Teacher)

Although whole school involvement in the programme was considered important, less than half of the teacher/leader survey respondents (45 percent) worked in schools, where everyone used PBS approaches, suggesting there were further opportunities for whole school development. In contrast, the three case study schools highlighted earlier were developing whole school implementation of PBS approaches.



Summary

Overall evaluation results highlighted the many positive and interrelated effects of the PBS programme, emphasising the social, physical, emotional and spiritual impacts for Māori and non-Māori students, their teachers, school leaders and wider school communities.

Findings illustrated the benefits of the programme radiated out of classrooms into playgrounds and staffrooms, positively impacting school culture as well as home and family settings.

The next section explores some of the 'unintended' positive consequences of implementation of PBS that emerged out of data analysis.

Unintended consequences

During teacher and school leader interviews, participants were asked about the 'unintended consequences' of implementing PBS approaches. Two major themes emerged from qualitative data that were then included in the teacher/leader survey to test generalisability. The first theme was the beneficial impact for boys and the second was how PBS was used to combat children's anxiety arising from the COVID-19 pandemic and associated restrictions.

Beneficial impacts for boys

One unexpected but positive consequence of PBS approaches had been the very noticeable impact for boys. This was a major theme that arose out of two case study school interviews.

"I noticed that with our boys, it's hard for them to talk about how they're feeling and the emotions they go through because everybody's worried about their image ... the big macho man. The alpha male in the class, I've seen our boys really come out of their shell and talk about how they're feeling and why they're feeling hōhā." (Teacher interview)

The programme reportedly assisted boys to calm their minds to make better choices. Changes in boys' behaviour could be dramatic and rewarding not just for the individual child but for those who interact with him.

"One of my boys was very clever, a talented student academically, but he had a few problems making the right choices socially within the playground or classroom setting. It really made a big difference for him ... it just brought the positiveness out of him ... it was exciting and motivating for him to see the changes he was making for himself because it really benefitted his wellbeing. His peers noticed the changes. They could see him as a calm child, and this improved his interactions with them, so he had more friends." (Teacher interview)

Survey results highlighted the generalisability of this finding, as many teachers/school leaders believed the use of PBS strategies had supported boys to describe their feelings (75 percent), and the use of these approaches

had supported boys to understand the feelings of others (73 percent).

Children who were surveyed identified that PBS had supported them to talk about their feelings to others. Forty six percent of children surveyed agreed with this statement (33 percent didn't know). Of interest, 40 percent of boys (10/25) believed the use of PBS had supported them to talk about their feelings. However, 24 percent (6/25) were 'not sure' whether they were talking more about their feelings. The results suggest more could be done to strengthen the focus on boys' mindfulness and emotional literacy. Demographic results of the teacher/leader survey showed the majority of participants (88 percent) were female suggesting the PBS programme could utilise more male role models.

Unexpected consequence - Dealing with COVID-19

This evaluation was undertaken during the global COVID-19 pandemic and the Level 4 community lockdown restrictions. Data analysis highlighted that another unexpected consequence of implementing PBS was dealing with the COVID-19 pandemic restrictions.

"My class stayed surprisingly calm and any conversations we had were quite mature. Some kids were able to say, 'Okay, I read this in the news' without other kids getting stressed and panicking. And even for some of my kids who I do know have some anxiety, I didn't see the stress, we were still just kind of carrying on as normal. They were comfortable enough for us to have a conversation or to ask me questions and it felt calm in our classroom." (Teacher)

"During lockdown, Pause, Breathe, Smile activities were a very important part of our learning plans for distance learning." (Teacher)

It appears that the strategies taught through PBS enabled students to cope during the COVID-19 crisis. Students commented about the importance of practicing PBS in response to the COVID-19 Pandemic.

"It helps me relax more after we have been in lockdown." (Student)

This finding was confirmed through the analysis of teacher/school leader survey results as many respondents believed the use of PBS activities had been beneficial for children during the COVID-19 restrictions (74 percent). Teachers commented about how helpful PBS strategies had been in dealing with community emergencies.

“There have been higher levels of anxiety at our school since the 2016 earthquake and post-COVID-19. PBS helped focus children on accepting their feelings and moving forward in a positive and supported way and has encouraged them to help others who are feeling overwhelmed.” (Teacher)

Opportunities for programme improvement

Teachers, school leaders and children were asked about any suggestions or recommendations they had for improvement to the PBS programme. Most children surveyed (42/58) did not have recommendations for programme improvement, however eight children felt more focus on mindfulness breathing and/or eating would be helpful and two suggested more focus on connections with whenua/environment. Analysis of teacher/leader surveys and interview data highlighted several other opportunities which are explored below. It is important to note the strengthening and further development of resources is likely to require further funding.

Opportunity to strengthen the focus on Te Whare Tapa Whā

Teachers and school leaders were extremely positive about the impacts of PBS and the use of Te Whare Tapa Whā and identified opportunities to strengthen its focus within the programme.

As highlighted in the first narrative of impact, Hakituri Kura had made some adaptations to PBS to situate the programme in their context, ensuring it was authentically place-based and culturally sustaining. The principal saw this happening through such means as integrating karakia (prayer), waiata (song), tikanga (customs), te reo and local iwi and hapū narratives about important tīpuna (ancestors).

“The programme has acknowledged Te Whare Tapa Whā in programme development. It’s certainly an area I think they could develop further around karakia and the connection with whenua, and with your tīpuna.” (Hakituri Kura principal)

Many teachers and school leaders wanted more practical resources linked to Te Whare Tapa Whā (67 percent) as well as more explicit links to te ao Māori (60 percent). Comments emphasised this as an opportunity to further strengthen the programme.

“I would like to see more recognition of Te Whare Tapa Whā and how we could build this to connect all learners in our classes to something they are familiar with – building this together.” (Teacher)

“Consult with Māori in mental health for more links to te ao Māori in each lesson.” (Teacher)

“For schools such as kura kaupapa a PBS version would need to be in Te Reo Māori.” (Teacher)

Teachers/school leaders who were surveyed wanted more activities for children from culturally diverse backgrounds (74 percent). Teachers requested more help to ensure their programme was culturally inclusive and responsive. Individual survey comments highlighted that some teachers struggled with this.

“Just more help with understanding Pasifika and Māori mindfulness, I found it hard for my students when I’d set it up as a silent/on your own activity without talking/looking at others, and I realised that maybe a reason it was hard for our Pasifika/Māori kids was that being connected at all times is such an important value – so how to help kids see that engaging with mindful practices doesn’t mean not being connected and more ideas for how/whether we can do ‘group mindfulness?’” (Teacher/school leader comment)



Opportunity for place-based examples and exemplars of whole school development that strengthen whānau and community involvement

Analysis highlighted the opportunity to provide more place-based examples of school implementation of PBS alongside exemplars of whole school development that have strengthened whānau and community involvement within the PBS programme. Teachers commented on the need for more examples of whole school development that involved community.

“Greater community involvement – more examples of whole school implementation involving the community would be good.” (Teacher)

Teachers appreciated that PBS had been developed within Aotearoa and this was a key strength that could be further enhanced.

“It’s great that PBS is a New Zealand programme. So many programmes come from places like the USA, UK etc and don’t always fit for us in NZ unless they are modified for use in NZ schools.” (Teacher)

Others highlighted how important community role models were, in promoting Pause, Breathe, Smile approaches.

“I would like to see Pause, Breathe, Smile implemented into all schools with Government support. Perhaps role models in our society who use Pause, Breathe, Smile could be encouraged to visit schools and share their experiences.” (School leader)

Less than half of the teacher/leader survey respondents (45 percent) worked in schools where everyone used PBS approaches, suggesting there were further opportunities for whole-school development. Whole-school approaches that enable teachers to work together to inquire into and improve their classroom climates and develop school-wide programmes for wellbeing are more effective than one-off workshops or short-lived interventions (Waters, 2011).

Opportunity to share and include more practise-based examples

Teachers and school leaders would like to see more practical examples of how teachers can use the PBS approaches in the classroom. Survey analysis indicated teachers/school leaders wanted more practical examples of teachers using the PBS strategies in their classrooms (68 percent) and more practical resources that linked to the New Zealand Curriculum (56 percent). This included expanding the bank of teacher resources on the PBS website. Sharing teacher practices, particularly adaptations or innovations for different age groups was an opportunity to strengthen the programme.

“Often teachers love spring-boarding off other people’s ideas. That could become part of the website. Someone does an awesome classroom display, or creates a little mini matrix, and so teachers think, ‘Yeah, I could see that working for my children.’ So, more sharing of ideas and it’s about sharing what’s working in teachers’ classrooms.” (School leader)

Surveyed teachers/leaders requested trouble-shooting advice when encountering problems in the classroom (68 percent). Similarly, teachers would like to see a way in which students could self, peer and/or group assess for mindfulness in class (68 percent). Finally, teachers and school leaders thought more focus on learner agency would be helpful (57 percent). Co-construction of resources with students was identified in teacher/school leader comments.

“Having children make videos demonstrating how to use each technique and individual testimonies on how it has impacted their lives. Making this accessible to teachers. Making stronger connections to the impact on children’s lives.” (Teacher)

“Among our school and many others there’s a big push towards this learner agency in children really taking that control I guess. And so it would be good to have some ideas about how we link this in with learner agency and some sort of self-evaluation or peer feedback/tracking where maybe they can identify at different points what else might be going on for them. Whether it’s at home

or in the playground, or whatever that might be impacting on their ability to connect with the programme ... so some way of co-constructing or evaluating our approaches with the kids.” (Teacher)

There was an indication from some teachers that engaging with the PBS facilitators post implementation would be beneficial.

“More follow up by PBS facilitators for teachers who did the course a while ago would be great.” (School leader)

“Are there opportunities to collaborate and connect with other PBS educators? Share wins, what has worked, share ideas etc?” (School leader)

“It would be great to have a means of ongoing input and follow-up for people who have done your training e.g. It would be good to have an online forum for teachers, and others using PBS, to stay connected and to share ideas.” (School leader)

Opportunity to further investigate and/or strengthen the use of PBS for boys

Data analysis emphasised that one unexpected, yet noticeable impact had been how the PBS programme had positively impacted on boys. Particularly their ability to talk about their feelings and inquire into the feelings of others. Teachers who noticed the positive impacts for boys, believed this aspect could be strengthened as it was essential for relationship building and emotional literacy.

“I think there could be even more emphasis on classroom climate and empathy, particularly since the programme has had such a big impact on boys. So, not only being able to pick up on how they’re feeling, but more focus on that emotional intelligence of actually being able to say, ‘Hey, so and so over there, I can kind of tell that something’s up.’ Like I know with my closest friends and family, if I’m speaking in a certain way, they can often tell something’s not sitting right with me. So, especially as they get older, not just that they can recognise things in themselves, but also better recognising of emotions in other people. And how they

deal with that, so understanding rather than reacting. Obviously we all need to be able to understand our own emotions before we can understand other people’s, but it could be something that is learned later in the programme, or at least be a stepping stone to have as the children get older and progress through school.” (Teacher)

There is an opportunity to further investigate and/or strengthen the use of PBS approaches on boys and the physical, cognitive, emotional, relational and spiritual impacts for them.

Opportunity to promote PBS approaches in preparation for community emergencies, such as COVID-19

The evaluation was undertaken during the COVID-19 lockdown. An unexpected consequence of PBS has been the way in which it assisted students to cope during the COVID-19 pandemic restrictions. There is an opportunity to promote PBS approaches in preparation for and response to community emergencies, such as COVID-19.

Conduct longitudinal research

Finally, there is an opportunity to conduct longitudinal research into the lasting impacts of PBS on school communities. Given that survey participants believed it had been helpful for children during COVID-19, there is an opportunity to conduct research into the impacts over time and the degree to which approaches enable greater resilience to disaster events. Interestingly, an analysis of teacher and school leader survey demographics revealed the majority of participants had been using the PBS programme for less than two-years (82 percent). Further research with school communities over time, would be useful in identifying how lasting these impacts are for culturally diverse children, their teachers and school leaders and their school communities.

Discussion

Pause, Breathe, Smile provides a major contribution to hauora and wellbeing for Māori and non-Māori tamariki, their teachers and school leaders and wider school communities.

Pause, Breathe, Smile provides a major contribution to hauora and wellbeing for Māori and non-Māori students, their teachers and school leaders and wider school communities. Evaluation evidence highlighted many interrelated impacts on learning and behaviour, including prosocial behaviour and in some schools a reduction of bullying and aggressive behaviour. Pause, Breathe, Smile is based on Te Whare Tapa Whā – an indigenous model of wellbeing which also underpins the New Zealand Health and Physical Education curriculum in schools where Taha Wairua is defined as ‘the values and beliefs that determine the way people live, the search for meaning and purpose in life, and personal identity and self-awareness’ (Ministry of Education, 2007). For this reason, Te Whare Tapa Whā was engaged as an overarching evaluation framework, demonstrating how the programme goes beyond simplistically depicted notions of hauora (Heaton, 2015) to view findings through a holistic Māori lens.

Four Pou, or dimensions of being, were used within the context of this evaluation. These are broad, limitless, interconnected, and intangible. As an example, in terms of conveying a sense of the impact of taha wairua, we have drawn on the notion of unforeseen transformations.

PBS approaches enabled teachers to enhance the social climate of their classrooms, strengthening relationships and communication between children and themselves and fostering a greater sense of connectedness, respect and belonging.

Improving classroom climates in such ways are highly effective for reducing bullying behaviours amongst children (Harvey, Evans, Hill, Henricksen & Bimler, 2016).

Research has emphasised the importance of teacher’s ability to consistently model emotional competency, being aware of and self-regulating their own emotional responses whilst teaching to ensure social cohesion, mutual respect and belonging (Harvey et al., 2016; Waters, 2011). This ability to model emotional competency is a significant variable for determining whether intervention programmes aimed at reducing bullying behaviours are effective in schools (Harvey et al., 2016). In this evaluation, teachers and school leaders reported being better able to self-regulate their own emotions, as well as positively express their feelings because of their use of PBS approaches. Both children and teachers reported that classrooms were considerably calmer and more conducive to teaching and learning activities.

While PBS is not specifically designed to address bullying, evaluation evidence highlighted that in some schools, teachers noticed a marked reduction in bullying and aggressive behaviour. Analysis highlighted that PBS improved Māori and non-Māori students’ pro-social behaviours in ways that positively impacted the quality of classrooms relationships, through enhanced emotional literacy and caring for others. Pro-social behaviour is characterised as behaving in ways that positively impact on others (Boyd & Barwick, 2011). Research studies on school bullying frequently align bullying

with relational problems and low levels of prosocial behaviour (Knowler & Frederickson, 2013). Using PBS approaches, children learned to identify their feelings and inquire into the feelings of others. Because children were more open about their feelings, teachers were able to adjust their teaching practices to better meet their needs. Children described emotionally calmer and safer classrooms and playgrounds, and a reduction in anxiety and anger as they and their teachers learned mindfulness techniques. Teachers and school leaders too, noticed that children were kinder and were playing together better, as well as showing more gratitude for the positive things in their lives. Research has demonstrated that prosocial behaviours that demonstrate care, kindness and empathy improve student belonging and connectedness in ways that prevent and reduce peer bullying in schools (Layous et al., 2012).

Emotional literacy is an important component of pro-social behaviour and caring school cultures. It is necessary for the wellbeing of individuals but also for school communities (Roffey, 2008; McLaughlin, 2008). In defining emotional literacy, McLaughlin (2008) cites the work of Weare (2004) and states it is “the ability to understand ourselves and other people, and in particular to be aware of, understand and use information about the emotional states of ourselves and others with competence. It includes the ability to understand, express and manage our own emotions and respond to the emotions of others, in ways that are helpful to ourselves and others” (p. 354). Emotional literacy supports social inclusion and prosocial behaviour development. The emotional climate of classrooms is particularly important if teachers are to create safe and effective learning environments for all students (Harvey et al., 2016). McLaughlin (2008) warns that emotional literacy cannot be viewed as an individual trait because to be effective in enhancing student safety and wellbeing, it needs to be fostered across the school community. Importantly, results from our evaluation highlighted how PBS activities had improved teacher/school leader understanding of the importance of emotional and social skill development within schools. Evaluation results highlighted how PBS had provided important opportunities for students and their teachers/school leaders to engage in tasks that enhanced their emotional-awareness,

interpersonal and social awareness, self-regulation and management, and pro-social relationship skills. It is argued that safe and caring schools provide opportunities for students to engage in such tasks by actively teaching and valuing these competencies (Boyd & Barwick, 2011; ERO, 2019).

A recent study of student experiences of bullying in New Zealand schools was undertaken by the Education Review Office (ERO, 2019). Findings indicate that male students experience more bullying behaviour than female students. Specific differences were that male students were more likely to report being called names, experience put downs and/or being teased as well as more physical forms of bullying than female students. Gender-diverse students also reported higher rates of bullying (ERO, 2019). Results from this evaluation, highlighted that the use of PBS approaches had resulted in unexpected, yet very positive impacts for Māori and non-Māori boys. This was a major theme that arose out of two case study school interviews and was later confirmed in teacher/school leader survey results. Many respondents believed the use of PBS strategies had supported boys to describe their feelings and better understand the feelings of others. The development of prosocial behaviour and emotional literacy for boys through PBS, is another important contribution to the prevention of bullying in schools. However, although evidence has highlighted this impact, it is unclear why and further inquiry is recommended.

In schools where a multitude of strategies and programmes aimed at improving children's prosocial behaviour and emotional literacy are implemented alongside one another, it is difficult to determine the impact of one programme. Teachers and school leaders discussed implementing PBS alongside other programmes aimed at reducing student conflict and bullying behaviour such as PB4L, restorative practices or Mana Potential. Implementing PBS alongside other complimentary school interventions that aim to reduce bullying within school communities, is likely to bolster impact. However, it will be important to ensure there is a congruence of the aims and intentions of complimentary programmes with the core values of the entire school community (McLaughlin, 2008).

For example, research on bullying prevention and reduction have emphasised school 'cultures of care' developed through a shared vision of wellbeing and safety for all (Boyd & Barwick, 2011; ERO, 2019). This is essential as bullying and conflict in schools is progressively viewed as a socio-ecological issue rather than a problem of an individual's behaviour (Boyd & Barwick, 2011; Harvey et al., 2016). Within Aotearoa, effective culturally responsive programmes for Māori students emphasise school cultures of care, through strengths-based approaches and positive whānau engagement (Savage et al., 2012). Holistic approaches to cultural safety within schools that promote Māori student wellbeing, respect for difference and inclusiveness have drawn on Te Whare Tapa Whā and its four pou (taha tinana, taha hinengaro, taha whānau and taha wairua) (Macfarlane et al., 2007). Results from this evaluation highlight how the PBS programme connects to Te Whare Tapa Whā and the many interrelated positive impacts for Māori and non-Māori students, their teachers and school leaders. Many participants believed that the use of PBS approaches has had a positive impact on their school culture, citing calmer and more effective learning and teaching environments. Importantly, teachers and school leaders believed PBS approaches were highly suitable for Māori tamariki and rangatahi and they valued the use of Te Whare Tapa Whā within the programme. They also identified opportunities to improve the focus of Te Whare Tapa Whā and connections to te ao Māori within the PBS programme.

The evaluation noted that ways in which schools had adapted the programme to suit their own context. For example, Hakituri Kura adapted PBS to ensure the programme was authentically place-based and culturally sustaining. The school integrated karakia, waiata, tikanga and te reo Māori alongside local iwi and hapū narratives into the PBS programme. The Principal also talked passionately about completely changing their behaviour management programme, blending the story of their tipuna 'Maia' and strategies of PBS to create a new model. This narrative demonstrates how schools can work with local communities to incorporate cultural narratives to enhance the responsiveness of the PBS programme for Māori tamariki and rangatahi. There are also opportunities to provide more place-based examples of school implementation of PBS alongside exemplars of whole school development that strengthen whānau and community involvement within the PBS programme.

Conclusion

Evaluation results emphasise the many positive, interrelated impacts that PBS had on Māori and non-Māori students, their teachers/school leaders and wider school communities. Results highlighted how the programme strengthened school 'cultures of care', that were more conducive to learning, engagement and wellbeing for culturally diverse students and their teachers. It is important to share the benefits and success of PBS with others who are working to improve the safety, health and wellbeing of Māori and non-Māori students and their school communities. Te Whare Tapa Whā is embedded within the PBS programme and presents a holistic approach for improving the social, emotional, physical and spiritual wellbeing of diverse groups of tamariki across Aotearoa.

Evaluation findings demonstrate that PBS provides a culturally responsive and holistic approach that strengthens prosocial behaviour, general wellbeing and engagement in learning through mindfulness practices.

Continuation and extension of the PBS programme is highly recommended.



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Appendix 1:

Description of evaluation methodology

The evaluation design utilised a culturally responsive and inclusive approach applying an exploratory sequential mixed-method design that included both qualitative and quantitative data collection and analyses.

The methodology was guided by the following research questions.

RQ 1: What is the perceived impact of Pause, Breathe, Smile?

- For Māori and non-Māori students (direct impacts on learning and behaviour, including student conflict, bullying and pro-social relationships)?
- For teachers and school leaders?
- For schools?

RQ 2: What are the unintended consequences for schools implementing Pause, Breathe, Smile?

RQ 3: What opportunities are there to enhance the training and implementation?

The evaluation was undertaken in different phases and involved different groups of stakeholders (both Māori and non-Māori) and analysis of interviews and surveys.

It was important that the evaluation approach was culturally responsive and inclusive as it involved Māori and non-Māori participants. Therefore, the overall evaluation methodology drew on kaupapa Māori principles articulated by Kennedy & Wehipeihana (2006, p. 1-2):

- **Self-determination** – including the right to make decisions about all aspects of their lives. Clear benefits to those being researched.
- **Acknowledgement and awareness** – refers to respect and due recognition and appreciation for indigenous culture, values, customs, beliefs and rights, including an acceptance of a worldview that may not be consistent with Western ideologies. Two of the researchers have Māori whakapapa and bring their experience working with whānau in community-based research.
- **Cultural integrity** – relates to the validity of indigenous knowledge and ways of being; the protection of cultural knowledge from misuse and misappropriation, and; its preservation for future generations. The researchers have demonstrated cultural integrity working for Māori organisations, iwi, hapū and whānau.
- **Capacity building** – enabling indigenous peoples to participate actively in the research, with the aim to ultimately drive their own research. Ihi Research is committed to building capability in all aspects of its research by working collaboratively and sharing knowledge.

Trust is a very important part of stakeholder engagement. The researchers took their ethical responsibilities very seriously and ensured their relationships in the school communities were given priority. This was particularly important during COVID-19 pandemic restrictions, whereby school communities made decisions on how and when data collection would be carried out.

Phase 1: Interviews

The first phase of this investigation involved semi-structured interviews with stakeholders from three schools that had been involved in the PBS programme. The purpose was to gain an understanding of the impact of PBS on culturally diverse children, teachers/school leaders and the wider school community. Another aim was to identify unintended consequences as well as opportunities for continuous programme development. All interviews were digitally recorded and transcribed. The following table outlined the numbers and characteristics of participants involved in interviews across three case study schools that were engaged in the PBS programme.

Table 1. Characteristics of participants involved in interviews

Stakeholders involved in interviews	Type	Totals	Ethnicity
	Tamariki	23	7 Māori 16 non-Māori
	Teachers and leaders	13	4 Māori 9 non-Māori

Phase 2: Surveys

Key themes emerging from interview findings informed the development of two surveys. One survey was developed for children (based on key themes emerging from student interviews) and another was developed for teachers and school leaders (based on teacher/leader interviews). For the teacher/leader survey the questions were rated on a 5-point Likert scale (e.g. 1-Strongly disagree, 3-No change, 5-Strongly agree). Respondents were also asked to indicate which areas of the programme would require improvement on a 3-point Likert scale (1-not at all, 2-needs some improvement, 3-needs focused improvement). 'I don't know' answer option was additionally provided.

Demographic questions included: region, gender, role in school, what year students/teachers teach, length of personal experience using Pause, Breathe, Smile, and to what degree it is used in the school. Teachers/school leaders were offered a small incentive of winning a \$100 creative classroom voucher to increase the response rate. Ethical statements were included at the start of the survey, explaining the purpose of the research and ensuring participant consent before the survey could be started.

The final numbers of survey participants (included completed and partially completed surveys) are presented in the following table.

Table 2. Numbers of survey participants.

Stakeholders involved in surveys	Type	Totals
	Tamariki	58
	Kaiako/teachers and school leaders	143

The clear majority of adult survey participants were female. Eighty-eight percent of teacher/leader survey participants were female. For the children’s survey 54 percent identified as female and 42 percent were male (a small number of students did not identify their gender). In terms of ethnicity 17 percent of survey respondents were Māori, and eight percent Pasifika. The majority (60 percent) identified as Asian and 35 percent as European/Pākehā. Four percent of students surveyed identified as MELAA – Middle Eastern/Latin American/African. It is important to note that multiple answers were possible.

Phase 3: Analysis and synthesis of findings

All data was analysed against the framework of Te Whare Tapa Whā to determine the extent of impact (both intended and unexpected). Qualitative data was analysed using NVivo. Inductive and deductive coding analyses were used. Survey quantitative analysis was conducted using Qualtrics and MS Excel.

A draft report was written based on document review and qualitative/quantitative data analysis. The draft report was submitted to the Mindfulness Group for review. Ihi Research and PBS programme leader(s) discussed recommendations. A final written report was then produced and submitted.

Ethical considerations

Ihi Research is a member of the New Zealand Evaluation Association and Mā te Rae – Māori Evaluation Association and the Aotearoa Social Value Network, and is committed to ensuring all evaluation activities adhere to the strictest ethical standards, ensuring informed consent and avoidance of harm.

Ethical guidelines and data collection processes outlined the purpose of the impact evaluation and use and analysis of data. A process for gaining written consent was provided to all participants involved in interviews, surveys and impact narratives.

Care was taken to ensure that participant consent was voluntary and there was a clear understanding as to the aims of the research and what happened to data collected from participants. Participants were informed of their right to decline to answer any questions and

to withdraw at any time. All collected data collection was kept secure. The viewing of confidential information was limited to necessary staff, and the location and dissemination strictly managed. All gathered information was kept physically and electronically secure with industry standard protection, including password protection on all computers from which it could be accessed. Access was limited to only the necessary personnel.

Please note throughout this report, pseudonyms have been used to protect the identity of individual respondents and schools.

Considerations

It is important to note that data collection coincided with the COVID-19 virus pandemic, which severely impacted opportunities to directly interview Māori and non-Māori children and their teachers/school leaders directly. The original plan included working with the three case study schools to conduct school visits and face-to-face interviews. It was felt there was an opportunity to also speak to whānau/family members about the changes they may have witnessed at home, as a direct result of children being taught PBS strategies. However, the timing of planned school visits coincided with COVID-19 Level 4 restrictions, so Zoom interviews were carried out with school leaders and teachers at the three case study schools. Student interviews (including Māori and non-Māori children) were conducted at one school via Zoom, but this proved difficult in terms of enabling children to talk openly.

Other student interviews were able to be carried out in one case study school once travel restrictions were lifted. However, student surveys largely replaced interviews in order to capture children's perceptions of the programme. Overall teacher/leader and children's survey findings related to impact were consistent with interview analyses, and these data sources complemented each other.

