

**Just Take a Second to Breathe:
Empowering Youth Through Mindfulness at Atawhai 2019**

A thesis
submitted in partial fulfilment
of the requirements for the degree
of
Master of Applied Psychology in Community Psychology
at
The University of Waikato
by
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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

2020

Abstract

This research was an evaluation of The Kindness Institute's 2019 Atawhai programme. It examined the effects that exposure to mindfulness-based skills, Māori cultural practices, mentoring, and the creative arts had on a cohort of marginalised youth. Specifically, the research aimed to determine (1) if learning mindfulness-based skills helped the youth to positively deal with challenges, (2) what effect learning mindfulness-based skills has on their positive and negative emotions and (3) were youth empowered to share the skills they learned within their homes, families and communities to enable a wider benefit from the mindfulness-based skills. Participants included 12 youth who attended the Atawhai programme during 2019. They all completed shortened versions of the Five Facet Mindfulness Questionnaire (FFMQ), Adolescent Self-Regulatory Inventory (ASRI), The Oxford Happiness Questionnaire (OHQ), Revised Children's Anxiety and Depression Scale (RCADS) and Self-Compassion Scale (SCS) at seven stages over a nine-month period from March 2019 to December 2019. Self-report debrief questionnaires and researcher observations were recorded during the October 2019 residential intensive of 5 days. Inferential statistics (repeated measures ANOVA and post-hoc paired t-tests) indicated a statistically significant increase in positive emotions ($p < 0.01$) with a large effect 1.07 over the duration of the evaluation period from March 2019 to December 2019; the October 2019 intensive, $p < 0.01$, $d = 1.37$; and the April 2019 intensive, $p < 0.01$, $d = 1.89$. Statistically significant decreases in anxiety ($p < 0.01$) with a large effect $d = 1.99$ were indicated over the duration of the evaluation period from March 2019 to December 2019; the October 2019 intensive, $p = 0.07$, $d = 0.57$; and the April 2019 intensive, $p \leq 0.01$, $d = 1.19$. Self-report measures indicated the youth; found the mindfulness-based skills beneficial, preferred a particular skill over others, and found their mentors supportive in helping them incorporate the skills into their daily lives. Youth reported they had continued their mindfulness-based practice outside Atawhai and were regularly sharing the skills within their homes, families and communities including their schools. These findings suggest the Atawhai programme has a profound and significant positive effect on the wellbeing of the young people it serves.

Acknowledgements

The following pages tell the story of twelve delightful, talented and brave rangatahi (youth) who attended Atawhai, October 2019. The author will be forever grateful to them for the fun, the laughter, and the inclusion on their Atawhai journey. The title of this thesis “Just take a second to breathe” is the words of one participant. It is only fitting it is their voice introducing this thesis.

A heartfelt thankyou is due to Kristina Cavit, Director of The Kindness Institute. Thank you Kristina for allowing this research to take place and trusting me throughout the process. I have come away from The Kindness Institute with far more than a completed thesis. Your mahi (work) has moved me deeply. It has been a pleasure to share our passion for helping kids.

My heartfelt thanks also goes to my supervisor Robert Isler. Thank you Robert for your wisdom, kindness, patience and encouragement. It was a privilege and a pleasure sharing this project with you. Thank you for being as enthusiastic and excited as I have been. Thank you for introducing me to Positive Psychology and The Kindness Institute.

Thank you to Trish Young and Rose Black. I have found our conversations on culture and Community Psychology extremely beneficial. Community Psychology will always be my true home.

And my deepest gratitude to my partner Dave and daughter Grace for your patience while “Mummy is doing University.” I am looking forward to planning some adventures with you both real soon.

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Glossary

Ako - to learn, study, instruct, teach, advise

Atawhai - to show kindness to, care for

Hā a koro ma, a kuia ma - breath of life from forbearers

Hapū - kinship group, clan, tribe, subtribe

Hauora - to be fit, well, healthy, vigorous, in good spirits

Hikitia te hā - lengthen the breath

Hinengaro - mind, thought, intellect, consciousness, awareness

Iwi - extended kinship group, tribe, nation, people, nationality, race

Kaupapa - purpose

Kaupapa whānau - family that is not connected by whakapapa (kinship) but by a shared purpose

Kei te pai whānau - you are doing well family

Kōrero - to tell, say, speak, read, talk, address

Mahi - to work, do, perform, make, accomplish, practice

Mahi tahi - to work together, collaborate, cooperate

Mana ake - unique identity of individuals and family

Manaakitanga - hospitality, kindness, generosity, support

Māoritanga - Māori culture, traditions, and way of life

Mau rākau - to bear a weapon, (a martial art based on traditional Māori weapons)

Mauri - life force or essence

Mauri ora - maximum health and wellbeing/flourishing

Mauri noho - languishing

Nekehanga - moving, shifting, relocating, movement

Noho - to sit, stay, remain, settle, dwell, live

Nohopuku – to be silent, quiet, inactive, fasting, (meditation practice)

Pae ora - healthy futures

Pākehā - New Zealander of European descent

Pūkana - to stare wildly, dilate the eyes, (word and hand action game)

Puku - stomach, centre, belly, tummy

Rangatahi - younger generation, youth

Taha - dimension, domain, part, portion, section

Tamariki - to be young, children

Tangata whenua - the people of the land, indigenous people

Tautoko - to support, supporting

Te ao Māori - the Māori world

Teina - younger person (brother, sister or cousin)

Te Pae Māhutonga - Southern Cross star constellation, (Māori wellbeing model)

Te reo - the Māori language

Te Whare Tapa Whā - the four walls of a house, (Māori wellbeing model)

Te Wheke – the octopus, (Māori wellbeing model)

Tinana - physical health

Tino rangatiratanga - self-determination, sovereignty, autonomy, self-government, domination, rule, control, power

Tuakana - older person (brother, sister or cousin)

Tuakana-teina – older sibling/cousin looking after a younger sibling/cousin, also a reciprocal teaching and learning approach between an older and younger sibling/cousin

Wai ora - healthy environments

Wairua - spirit, soul

Wānanga - to meet and discuss, deliberate, consider

Whakawhanaungatanga - process of establishing relationships, relating well to others

Whānau - family

Whānau Ora - healthy families

Whanaungatanga - relationship, kinship, sense of family connection

Whare - house, building, residence, dwelling, shed, hut, habitation

Whatumanawa - the open and healthy expression of emotion

Whenua - land

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Chapter One: Introduction

Chapter Overview

This chapter introduces the topic of mindfulness for youth. It outlines how this evaluation came about and the key aspects of the evaluation including the aim, research questions and significance of this study. It introduces The Kindness Institute and the Atawhai programme. This chapter concludes with a summary of the chapters to follow.

Introduction

“No matter what we are doing, we are doing it mindlessly or mindfully, and the consequences of being in one state or another are enormous”

(Langer, 2014 p. 14).

Mindfulness has been defined as paying attention to our thoughts and feelings, without judgement, in the present moment (Kabat-Zinn, 1994). It originates from meditation rituals that have been used in Buddhist spiritual practices for over two thousand years. The purpose of mindfulness in Buddhist teachings is to lead to the cessation of personal suffering (Bishop et al., 2004).

Over the past few decades mindfulness has gained popularity in the west. Research on adults suggests mindfulness is an effective antidote to many of the ills of modern society. It has been found to reduce anxiety, depression and stress (Khoury et al., 2015) and combat addiction, aggression, chronic pain and substance abuse (Sedlmeier et al., 2012).

Mindfulness is embraced in the discipline of positive psychology, the scientific study of human flourishing and what enables individuals and communities to thrive (Seligman & Csikszentmihalyi, 2000). Over the last twenty years mindfulness, and other wellbeing tools, have been incorporated globally into a number of educational programmes for children and adolescents (Seligman & Adler, 2018). This inclusion has led to increases in learning potential, creative thinking ability, and life satisfaction for youth (Seligman, 2011). It is also a mechanism to address the alarmingly high prevalence of adolescent depression worldwide (Seligman, 2011).

There is limited research about the benefits of mindfulness interventions for youth. Most programmes are not evaluated and therefore there is little evidence to support their effectiveness (Lombas, 2019). Some research suggests mindfulness supports adolescent development by supplying a mechanism for emotional balance to combat internal and external stressors (Broderick et al., 2012; Joseph, 2015; Metz et al., 2013).

Addressing mental wellness in youth is critical, as adolescence is a period associated with a high risk of developing significant social, emotional and behavioural problems (Broderick et al., 2012). The World Health Organisation reports that twenty percent of young people suffer from a mental health problem within any given year (World Health Organisation, 2017). Many problems presenting in adolescence are preventable yet they may persist and continue into adulthood (Broderick et al., 2012).

Environmental factors play a part in adolescent development and wellness (Ball, 2010). Aotearoa New Zealand has been identified as a country with extreme rates of family violence, child abuse and high rates of societal problems such as poverty, inequity and adult mental health (The Office of the Children's Commissioner, 2017). In 2017 the Prime Ministers Chief Science Advisor announced a 'youth suicide crisis' (Stubbing & Gibson, 2019). In 2018 Aotearoa New Zealand was identified as having the highest rate of teen suicide in the world (Stubbing & Gibson, 2019). Māori and Pasifika families are disproportionately overrepresented in these statistics (The Office of the Children's Commissioner, 2017).

Research tells us where the social determinants of health are lacking there is little an individual can do to change their circumstances (Hodgetts et al., 2016). Durie (2001) states that personal changes in behaviour can somewhat improve health outcomes for Māori but unless there is structural change at higher levels little will change. The social determinants of health include factors such as social exclusion, educational processes, food and housing insecurity, racism, and access to health and social services. Culture is defined as a central determinant of health as it is critical to the wellbeing of ethnic groups (King et al., 2018). In Aotearoa New Zealand disparity in the social determinants of health has a negative effect on Māori and Pasifika in particular (Hodgetts et al., 2016).

This thesis is an evaluation of a programme called Atawhai which is delivered by The Kindness Institute in Auckland. Atawhai is a holistic mental wellbeing programme for marginalised rangatahi (youth). Atawhai's kaupapa (purpose) is to empower rangatahi with

lifelong mindfulness-based skills they can use to self-manage their own lives. Rangatahi are encouraged to teach these skills to their whānau (family) and community to promote wellness at a wider group level.

This research project is an outcomes evaluation that explores the effects of the Atawhai programme on a cohort of marginalised youth. Through a child-centred ecological perspective it also explores whether youth are empowered to be influential change makers in their homes, whānau and communities.

The Current Evaluation

The idea of an evaluation of The Kindness Institutes Atawhai programme was first conceived in 2017. Associate Professor Robert Isler met the Director of The Kindness Institute, Kristina Cavit, at a “Mindfulness for change” hui. Robert witnessed a presentation by Kristina and Atawhai alumni and was very impressed with the work being done by The Kindness Institute.

The author became interested in being part of an evaluation when she took a Positive Psychology paper (PSYC557) convened by Robert in 2018. Robert spoke to the class about the work being done with youth at Atawhai.

The author has an interest in youth wellbeing, in particular evidence-based strengths-focused approaches. In her current role as a volunteer mentor for Big Brothers Big Sisters of Hamilton, and her previous employment as a Youth Case Manager the author has worked closely with young people and their whānau. She has witnessed the benefits of programmes aimed to promote flourishing and minimise risk and harm.

On March 1, 2019 a meeting took place at The Kindness Institute office in Auckland to discuss the possibility, and logistics, of evaluating Atawhai 2019. In attendance were Kristina Cavit (Director of The Kindness Institute) Associate Professor Robert Isler (the supervisor of this thesis), and Sue McAllister (the researcher and author of this thesis). A long-term Atawhai programme mentor, Dominic Hoey, was present during the mid-stages of the meeting.

At this meeting Kristina expressed her interest in a formal evaluation of the Atawhai programme. She said an in-house evaluation of Atawhai in April 2018 had produced very favourable results.

The key points that the author took from the meeting was that the Atawhai programme is based on mindfulness and it has two core intended outcomes; the first is to support rangatahi to deal with challenges and enable them to function well in their communities; the second is to train them to become wellbeing teachers.

A number of video calls, phone calls and emails followed the March 2019 meeting. Their purpose was to settle on an evaluation aim and plan the research process going forward. With a new cohort of rangatahi commencing their Atawhai journey on March 30, 2019 an evaluation plan was needed promptly.

The Evaluation Team

The evaluation team comprised of two students, myself (Sue McAllister) and Courtney White. As both Courtney and I undertook this research as a requirement for a Master qualification two separate research reports have been completed. Courtney's research (White, 2020) is referenced in this thesis.

Both myself and Courtney were supervised throughout our research by Associate Professor Robert Isler.

Research Aim

The aim of this evaluation was to collect quantitative and qualitative data from participants of the Atawhai 2019 programme, and write a report documenting the ways Atawhai contributes to developing rangatahi through the use of mindfulness-based skills, and any impact Atawhai has within rangatahi's homes, whānau, and wider communities.

Research Questions

In order to achieve the research aim, the following research questions were developed:

1. Did rangatahi learn skills at Atawhai 2019 that will help them positively deal with challenges?
2. What effect does the Atawhai programme have on rangatahis' positive and negative emotions?
3. Are rangatahi empowered to share the skills they learn within their homes, whānau and communities to enable a wider benefit from the mindfulness-based skills?

Significance of this Study

This research is significant as it is the first independent formal evaluation of the Atawhai programme which has been running since 2016. This thesis details the evaluation process and may be useful for future evaluations of this programme or other youth programmes run by The Kindness Institute. It is intended this evaluation will provide feedback to The Kindness Institute on how the Atawhai programme is tracking to achieve its kaupapa (purpose) of empowering rangatahi with lifelong mindfulness-based skills they can use to self-manage their own lives. The Kindness Institute will then have the opportunity to incorporate any useful findings into future programmes as they see fit.

An additional benefit is to add to the research on positive youth wellbeing programmes within an Aotearoa New Zealand context.

Atawhai

“TKI [The Kindness Institute] exists to empower marginalised rangatahi in Aotearoa to transform their mental health and wellbeing, and that of those around them, through Te Whare Tapa Whā-guided programmes and advocacy designed to develop resilience and leadership.”

The Kindness Institute Mission Statement (personal email 2/10/2019)

Atawhai, meaning kindness in te reo (the Māori language), is a programme delivered by The Kindness Institute in Auckland. It was launched in 2016 in response to the youth mental health crisis in Aotearoa New Zealand. Atawhai works with marginalised rangatahi to improve their mental health through mindfulness, yoga, mentoring and the creative arts (K Cavit, personal email 13/4/18). The Kindness Institute states that “although these young people have low levels of self-efficacy (the belief in their ability to meet challenges), they have great potential to learn new skills, improve their mental health and transform their lives” (K Cavit, personal email 2/10/2019).

The Kindness Institutes’ expected outcomes for rangatahi (Appendix A) can be summarised as follows. Improvements in: emotion regulation; relationships; participation; choice; possibilities; sense of identity; cultural connection; self-worth; self-efficacy; wellbeing; sense of belonging; and sense of purpose. These are to be achieved from the use

of breath and mindfulness techniques. Expected outcomes for the community are that rangatahi are empowered to be leaders and teachers in their communities, and reduced stress in the community. The expected outcomes specify rangatahi are encouraged to tap into their own strengths and employ them in all areas of their lives.

Atawhai works on a rangatahi-led concept where rangatahi have input into the programme design, delivery and evaluation (K Cavit, personal email 2/10/19). Rangatahi are paired with an adult mentor who guides and supports them on their Atawhai journey.

Atawhai draws on indigenous knowledge bases of health which are integral to indigenous identity and wellbeing. Atawhai is an inclusive space where ethnic and gender diversity is welcomed. At Atawhai all rangatahi work with the same concepts for the betterment of themselves and the collective.

Atawhai works with rangatahi aged between 14 to 18 years of age, predominantly of Māori and Pacifica ethnicity (K Cavit, personal email 2/10/2019).

Rangatahi are invited to stay on the Atawhai programme for 12 to 24 months, or even longer in some cases. They are recruited from The Kindness Institutes community partners, low decile schools and corrections programmes (K Cavit, personal email 13/2/2019).

The kaupapa (purpose) of Atawhai is built on 5 principles: non judgement, vulnerability, self-compassion, fun and support. (K Cavit, personal email 2/10/2019).

The 12-month Atawhai programme consists of two week-long intensives, two performance events, monthly one-day workshops and weekly stress management coaching and mentoring (The Kindness Institute, 2018).

At the week-long intensives rangatahi learn mindfulness, meditation, yoga, and life skills with their mentors; a group of artists, youth workers and mindfulness practitioners. Rangatahi also work with their mentors one on one, or in small groups, on creative projects such as acting, rap, poetry, music and dance. Many of the activities take place outdoors where rangatahi learn about connecting to nature. Daily activities include group kōrero (conversation) around mindfulness, gratitude practices, stress management and capacity building activities. The Atawhai programme aims to develop present moment awareness, mental and physical strength, compassion, kindness and gratitude. Rangatahi learn to deal with challenging emotions and improve their communication, decision making and relationship skills (The Kindness Institute, 2018).

An important aspect of Atawhai is whanaungatanga (relationships). Mindfulness is used to strengthen the Māori perspective that a person's identity and hauora (health) form part of the collective rather than being individually focused (The Kindness Institute, 2018). Atawhai teachings embrace Mason Durie's Te Whare Tapa Whā health and wellness model (The Kindness Institute, 2018).

A key component of the Atawhai kaupapa (purpose) is the 'training the trainer' model. This is where rangatahi are empowered to teach mindfulness, yoga & stress management to each other and their families and communities (The Kindness Institute, 2018).

The Atawhai programme has been developed with long term outcomes in mind. The model is inspired by Jon Kabat Zinn's mindfulness stress reduction programme, The Work of Byron Katie and the Holistic Life Foundation's (HLF) work with youth living in urban poverty (The Kindness Institute, 2018).

Previous Atawhai Evaluation

An in-house evaluation of Atawhai was undertaken by The Kindness Institute during the April 2018 week-long intensive. Participants were six rangatahi aged 15-17 years of age, their mentors and other volunteers that were part of the ongoing Atawhai programme for 2018 (The Kindness Institute, 2018).

Data was collected from rangatahi self-assessments, daily group debriefs and post retreat in-depth interviews. Post-retreat the rangatahi were interviewed in order to find out how they were integrating their learnings into their daily lives. One hundred percent of the rangatahi reported that they found the programme helped them to better manage stress and challenging situations in their lives through the use of mindfulness and breathing techniques. They also reported they were practising mindfulness and teaching it to their communities. Many rangatahi reported an increased connection to family, friends and their community. Many also indicated improved ability to: communicate and manage conflict; forgive those who had hurt them; be kind to others; focus; and be confident. (The Kindness Institute, 2018).

Internal evaluations are a useful tool for organisations to gauge their impact and effectiveness. They come with a number of advantages and disadvantages. The advantages of an internal evaluation is that the evaluators will have a good knowledge of the work,

culture, aims and objectives of the organisation. Another advantage is that the participants will be familiar with the evaluators and therefore potentially more comfortable talking to them. This can also be a disadvantage due to the tendency for people in social situations to reply more positively in order to please others (Dahlberg & McCaig, 2016). The use of in-depth interviews is an advantage as face-to-face participants generally feel more obliged to give carefully considered answers than they may on a written questionnaire (Dahlberg & McCaig, 2016).

Thesis Overview

This thesis is comprised of five chapters, the first being the preceding introduction.

Chapter Two provides a literature review. It explores adolescence as a lived experience, both historically and present-day, for youth in Aotearoa New Zealand. It discusses the concept of empowerment through an ecological lens inclusive of individual, family and community levels. It defines the terms mindfulness, self-regulation and happiness which are focussed on in this evaluation. It explores research around wellbeing strategies for youth.

Chapter Three outlines the methodology for this research. The participants, research instruments, evaluation procedure and methods used to analyse the data are explained.

Chapter Four presents the research results in relation to the three research questions. Quantitative data is presented in relation to the findings on positive and negative emotions. Qualitative data is presented to support the quantitative data and explore the experiences of youth in relation to the themes that emerged from the research.

Chapter Five discusses the research findings in relation to empowering youth at the individual, whānau and community levels. In a broader context we explore Atawhai in relation to the field of youth wellbeing in Aotearoa New Zealand.

Chapter Two: Literature Review

Chapter Overview

When addressing societal problems in the present it can be helpful to first look back to the past. This chapter will begin by looking at what life was like for tamariki (children) and rangatahi (youth) growing up in Aotearoa New Zealand prior to colonisation. It then looks at what life is like for them now, including Aotearoa New Zealand's current 'youth suicide crisis'. This chapter discusses strategies and programmes aimed to improve youth wellbeing. This chapter looks at Positive Psychology as a discipline. It defines the terms empowerment, mindfulness, self-regulation and happiness which are key concepts in this evaluation.

The past

"Traditionally tamariki were citizens of our communities who contributed, had agency and were pivotal parts of the wellbeing of the collective."

(Pihama et al., 2018 p. 16).

Wellbeing for Māori has always been collectively defined (Pihama et al., 2018). In Māori culture a person is not treated as an individual but as part of a collective, a whakapapa (kinship) group that transcends time and space to form a continuous and permanent Māori cultural identity (Aho & Liu, 2010). For Māori personal identity is always recognised as part of the wider collective. (Kingi et al., 2018).

Whānau (collective family group), strong cultural identity, and ethnic engagement are important for young Māori to develop positive wellbeing (Williams et al., 2018).

Through tikanga (Māori customary practices) wellness is addressed holistically for Māori and encompasses spiritual, physical, mental and social aspects of health (Durie, 2001; Mark & Lyons, 2010). Māori are relational and recognise social connections with whānau and connections with whenua (land) as critical to their wellbeing (Durie, 2001; Mark & Lyons, 2010).

In early times Māori practiced mindfulness and meditation. The Māori word for meditation practice is nohopuku. Its' literal translation is noho (sit) and puku (stomach,

centre), but it is better described as “to dwell inwardly with one’s innermost feelings” (Royal, 2007, The flow of mana, para.2). For Māori the puku is recognised as the place where emotions sit and therefore it plays an important role in regard to responses and actions (Pohatu, 2011).

Accounts of Māori from the 1800’s depict a sophisticated society whose health and wellbeing was largely positive (Kingi et al., 2018). Whānau and culture were protective factors for Māori wellbeing and mental health (Pihama et al., 2018). Children were trained through games to prepare them for their roles in adulthood. Games included lessons on weaponry, food production and parenting. Children were included in all aspects of communal life including military exercises with their fathers and tribal assemblies of chiefs (Jenkins et al., 2011). Early in life specific attributes were noticed about tamariki. Tupuna (ancestors) were careful in recognising these strengths. Tamariki were nurtured to maximise these skills for the wellbeing of the wider whānau (Pihama et al., 2018).

Colonisation did not accept Māori collective ways of being (Pihama et al., 2018). Under colonisation Māori were separated from their lands and communities, and denied their native language, culture, and traditional health practices (Pihama et al., 2018). Under settler law children lost their agency when they became ‘possessions’ of their parents (Love, 2002; Pihama et al., 2018).

The Present

Population

Aotearoa New Zealand is a multicultural nation that recognises Māori as tangata whenua (the people of the land, indigenous people). According to the 2013 census Māori accounted for 14.9% of the total population with 43.6% being under 20 years of age (Statistics New Zealand, 2013).

Aotearoa New Zealand also has a significant presence of Pacific peoples. This term includes Samoan, Cook Island Māori, Tongan, Niuean, Fijian and a number of other ethnic groups who originate from islands in the Pacific (Ministry of Pacific Peoples, 2018). In 2013 7.4% of New Zealand’s population identified with one or more Pacific ethnic group. Of this 46.1% were under 20 years of age (Ministry for Pacific Peoples, n.d.).

Despite diverse languages and cultures Pacific peoples share a number of similar values. Their view of wellbeing is holistic and includes language, culture, family and

community. Family is of central importance to their wellbeing and contributes to identity and belonging. Pacific peoples also value community. Working together as a collective is more important than individualism. Spirituality, reciprocity and respect also contribute to thriving and resilient Pacific communities (Ministry of Pacific Peoples, 2018).

The ‘Youth Suicide Crisis’

The youth suicide rate in Aotearoa New Zealand is the highest in the OECD. In 2017 the Prime Minister’s then Chief Science Advisor, Peter Gluckman, called it a ‘suicide crisis’ (Stubbing & Gibson, 2019).

The suicide rates for Māori and Pacific Island youth in Aotearoa New Zealand are significantly higher than for other ethnicities (Stubbing & Gibson, 2019). Māori youth are recognised as having higher rates of suicide attempts and poorer general wellbeing than their Pākehā (New Zealander of European descent) peers (Williams et al., 2018). A similar trend is observed for indigenous youth in other colonised countries (Aho & Liu, 2010; Stubbing & Gibson, 2019).

Colonisation continues to affect Māori through ongoing structural racism, inter-generational trauma and the breakdown of traditional cultural norms. These factors have led to a hopelessness and despair for Māori youth (Aho & Liu, 2010). Cultural alienation (deculturation) in the form of loss of language, traditions and cultural identity is a determinant of suicide for young Māori (Aho & Liu, 2010).

Aotearoa New Zealand’s most recent review by the United Nations Committee on the Rights of the Child was in 2016. They identified the following concerns; unacceptable high rates of violence; abuse and neglect of children; increasing child poverty; inadequate housing; and recognition that Māori, Pacifica, and children with disabilities experience greater negative outcomes (The Office of the Children’s Commissioner, 2017).

Research published in 2006 showed thirty-three percent of Māori aged 16-24 experienced a mental disorder in the previous twelve-month period. Those living in the most deprived areas had the highest rates of disorder (Kingi et al., 2018).

Negative life experiences rendering youth to feel hopeless and helpless to change their situation was a significant theme identified by youth as the cause for suicide (Stubbing & Gibson, 2019).

How can we Improve Youth Wellbeing?

“when Māori youth are engaged in their own development and reclaiming their own cultural identity, it gives them purpose, meaning, and thereby a will to live”

(Aho & Liu, 2010, p. 127).

Research in Aotearoa New Zealand, and internationally, concur that the most effective programmes for indigenous children and youth include traditional knowledge bases, are driven by the community, and recognise the importance of family (Ball, 2010).

Two areas that adolescents identified as important to their wellbeing was a strong Māori identity and being part of a collective. They also suggested coping and being able to manage anger were life skills (Ball, 2010).

Professionals and adolescents suggest wellbeing programmes need to consider culture, family and community, be interactive, long-term, and have consistent caring staff. The involvement of youth in making decisions is crucial (Ball, 2010).

The Aotearoa New Zealand Education Review Office (ERO) identifies the following as culturally effective practices to promote and respond to youth wellbeing. Manaakitanga (hosts care for their visitors emotional, spiritual, physical and mental wellbeing), whanaungatanga (connecting and relating to people in culturally appropriate ways and supporting the collective), ako (a teaching and learning relationship which is a two-way process where power is shared) and mahi tahi (working together collaboratively for a common purpose). The ERO promotes Te Whare Tapa Whā as a useful wellbeing resource (ERO, 2016).

The Ministry of Health (2015) has a vision of pae ora (healthy futures) for Māori health. It builds on the currently operating whānau ora (healthy families) model to include mauri ora (healthy individuals) and wai ora (healthy environments). It is about a journey which includes managing distress and crisis, identifying and maximizing strengths, and working towards balance in the spiritual, mental, physical and social domains (Kingi et al., 2018). Pae ora’s vision is to support a shift for those in a state of mauri noho (languishing) to a state of mauri ora (flourishing) (Kingi et al., 2018).

Youth Development

Adolescence is a developmental period associated with risk, and also a stage where the opportunity for positive growth and flourishing is possible. It is a time of development where a young person's habits, choices and influences can affect the construction of a healthy identity (Oberle & Schonert-Reichl, 2014).

It is common for adolescents to adopt unhealthy coping mechanisms to deal with distressing feelings or situations (Broderick et al., 2012). Rumination, aggression and substance abuse are some of the cognitive or behavioural strategies used.

Adolescence is also time of development where the brain is malleable and through plasticity there is capacity to take in new knowledge and ways of doing things. It is a time where learning new coping mechanisms is a possibility (Oberle & Schonert-Reichl, 2014).

Positive Psychology

Positive psychology is the scientific study of human flourishing and what enables individuals and communities to thrive. Historically psychology has been strongly focused on ill-health and problems. Positive psychology is a shift from this paradigm. It suggests the answers to some of society's most chronic problems may lie in exploring what is going well for people (Seligman & Csikszentmihalyi, 2000).

Positive Psychology focuses on three main areas: positive emotions, positive individual traits, and positive institutions (Seligman & Csikszentmihalyi, 2000).

Positive psychology has found that positive emotions and happiness can be built and wellbeing can be cultivated. Through hard work individuals can increase their happiness. Diener et al. (2017) has found that positive emotions are impacted by social relationships and negative emotions are connected to internal and social struggles.

Positive individual traits can also be referred to as signature strengths. Since positive psychology's inception significant advances in prevention have come from focusing on building strengths, not on correcting weakness (Seligman & Csikszentmihalyi, 2000). One example of this is that building optimism has been found to prevent depression (Seligman et al., 1999).

Positive psychology identifies positive institutions as organisations that are inclusive of family, community, schools and democracy. Positive institutions that engage with youth start with teachers being equipped with wellbeing skills themselves (White & Murray, 2015).

One of the founders of positive psychology, Martin Seligman, created a theory of wellbeing he called PERMA (2011). This acronym stands for five wellbeing pillars that create the foundation for a flourishing life. These pillars are; positive emotion, engagement, relationships, meaning and accomplishment (Seligman, 2011).

Youth programmes with a positive psychology focus aim to improve adolescents personal and social development and to foster their happiness and that of their wider community. This all contributes to the young person's overall wellbeing (Lombas et al., 2019).

Empowerment

What is It?

In te ao Māori (the Māori world) empowerment is addressed through the word tino rangatiratanga (self-determination). Whilst this term has a political aspect and is used to describe Māori sovereignty, authority, and control over resources, it is also used to describe the rights of Māori to wellbeing (Durie, 1995, Pihama et al., 2018). Smith (1997 p.20, as cited in Pihama et al., 2018) identifies tino rangatiranga as “the goal of seeking more meaningful control over one's own life and cultural wellbeing.”. Pihama et al. (2018) note that rangatiratanga is both a macro and micro process, radiating both externally and internally for individuals and the collective.

Empowerment is addressed in positive psychology through the promotion of character strengths. Character strengths are positive qualities that are beneficial to an individual and their wider community. There are 24 character strengths which are valued in every culture in the world (Seligman, 2011). They can be grouped into six main headings; wisdom and knowledge, courage, humanity and love, justice, temperance, and transcendence (Seligman, 2011; full list Appendix O). Signature strengths refer to the character strengths that are strongest in an individual's profile. Seligman & Csikszentmihalyi (2000) report that strengths such as optimism, interpersonal skills, and future mindedness act as buffers against mental illness. White and Murray (2015) suggest that focusing on strengths may promote enduring change through supporting autonomy and competence.

In Aotearoa New Zealand a group of Dunedin primary and intermediate schools have found the use of signature strengths has a beneficial effect for children (Quinlan, 2017). The low to mid-SES (Supplemental Education Services) schools focused initially on developing

five strengths which had been identified in previous research as being helpful for relationships and wellbeing. These were gratitude, love, hope, curiosity and enthusiasm. Eventually they included the full 24 character strengths (Quinlan, 2017). The research recognised that all children have strengths. The research found that children who are aware of their strengths are more likely to flourish (Quinlan, 2017).

A study of New Zealand workers by Hone et al., (2015) found that those who knew their signature strengths scored higher in wellbeing measures than those who did not. Those that knew their signature strengths were nine times more likely to be included in the top wellbeing group. Those that knew their signature strengths, and used them, were 18 times more likely to be included in the top wellbeing group.

Empowered Community Settings

White and Murray (2015) report that positive institutions that empower their communities are inclusive of family, community, schools and democracy. They start with teachers being equipped with wellbeing skills themselves.

Matton (2008) describes three external impacts of empowering community settings. These are empowered individuals, empowered members radiating their influence and external organisational activities.

According to Matton (2008) empowerment includes active and sustained participation over time, and it results in increased awareness and capacity for its members. For a community setting to be empowering it must have empowering processes and empowering outcomes.

Empowering Youth

Youth empowerment is where children and young people are encouraged to take control of their lives. The aim of youth empowerment is to improve their quality of life. This is attained through participation, learning new skills and shared decision making (Matton, 2008). The benefits of youth empowerment are increased resilience, improved wellbeing and engagement, and youth who are better capable of managing adverse situations (Matton, 2008). Empowering youth can buffer them from depression and anxiety (White & Murray, 2015).

Traditionally for Māori, knowledge was passed from generation to generation. Children were empowered through being part of both the teaching and learning process (Pihama et al., 2018). In te ao Māori the same word, ako, is used for both teaching and learning. It recognises that learning is reciprocal, the learner and teacher roles are interchangeable and supportive of each other (Pihama et al., 2018). In te ao Māori the concept of tuakana-teina refers to an older sibling looking after a younger sibling and also a reciprocal learning relationship between the tuakana (older sibling) and teina (younger sibling) (Pihama et al., 2018).

Self-determination theory identifies three basic needs for healthy adolescent development: competence, belonging and autonomy (Ryan & Deci, 2000). Oberle & Schonert-Reichl (2014) suggest in addition to belonging youth have a need for mattering in their communities and society and an interest in contributing to them.

Youth empowerment differs from youth development. Youth development focuses on individual change while youth empowerment focuses on community change as the result of increased individual capacity.

Empowered Youth can Influence Their Community

Empowered individuals can become change agents within their communities. The collective action of empowered individuals can contribute to community betterment and social change (Matton, 2008). At the collective level citizen mobilisation can lead to a culture change (Matton, 2008).

Empowerment Through Culture - Māori Health Models

A number of Māori health models have been developed for use when working with Māori. Three of them are discussed further below.

Te Whare Tapa Whā. In Aotearoa New Zealand Te Whare Tapa Whā (The four walls of the house) is a Māori wellness model (Durie, 1985). Te Whare Tapa Whā identifies health as a balance between the four elements of; taha wairua (spiritual, including cultural identity), taha hinengaro (mental, including knowledge, information, cognition, management of emotions and control of behaviour), taha tinana (physical health, mind and body links) and taha whānau (relationships with whānau and community, social

participation). Mauri Ora (flourishing) emphasises a balance between these four walls is needed for strong mental health (Kingi et al., 2018). It also recognizes that poor mental health is often linked to the conditions people are born and grow up in and inequalities faced in daily life (Kingi et al., 2018).

Te Pae Māhutonga. Mason Durie (1999) developed a subsequent health model called Te Pae Māhutonga. This name is in reference to the constellation of stars commonly referred to as the Southern Cross. This model recognizes six elements as contributing to health; mauri ora (access to te ao Māori - the Māori world, cultural identity), waiora (environmental protection), toiora (healthy lifestyles), te oranga (wellbeing), ngā manukura (leadership), te mana whakahaere (autonomy).

Te Wheke. Another Māori Health model, Te Wheke, was developed by Rangimarie Rose Pere (Love, 2004). This model presents an octopus as a representation of whānau, hapū (kinship group) or iwi (extended kinship group). The eight overlapping tentacles represent the interconnected nature of eight dimensions that affect health; wairua (spirit), mana ake (unique identity of individuals and family), mauri (life force in people and objects), whanaungatanga (relationships), tinana (physical health), hinengaro, whatumanawa (the open and healthy expression of emotion), and hā a koro ma, a kuia ma (breath of life from forbearers).

Te Whare Tapa Whā was originally developed by Mason Durie (1985) for use in mental health services. It has developed over the years as a framework that can be used in a number of settings (Durie, 2001). Despite this model being nearly 40 years old it is still widely used and promoted by the Ministry of Health (2017) and The Education Review Office (2016, p. 26). Te Whare Tapa Whā's concept of promoting balance to achieve wellbeing, is as relevant to health now as it was when it was first developed.

Empowerment Through Mindfulness

“More than one thousand independent scientific studies conducted at two hundred universities and institutions in twenty-seven countries, published in leading scientific journals, attest to the psychological and physiological benefits of meditative practice”

(Lieberman, 2017, p. 166).

Teaching children the conscious skill of mindfulness is an empowering one. Being able to stop, be present, and take notice of the moment strengthens self-regulation and self-awareness. Once learned it becomes a lifelong skill that children who experience stress, anxiety, depression, and anger can use. Once familiar the simple skill is easily accessible, even in times of stress (Broderick et al., 2012).

What is Mindfulness?

Mindfulness is a form of mental training. Its aim is to increase cognitive stability and reduce reactivity to thoughts and ideas that can lead to stress (Bishop et al., 2004; Meiklejohn et al., 2012). It is not a relaxation or mood management technique (Bishop et al., 2004; Sedlmeier et al., 2012). It is not about changing beliefs or avoiding experiences. Mindfulness is about building attentional capacity to be less reactive (Metz et al., 2013).

Mindfulness has been defined as paying attention to thoughts and feelings, without judgement, in the present moment (Kabat-Zinn, 1994).

Two components are mentioned in almost every definition of mindfulness. These are present-moment attention and non-judgemental acceptance of experiences (Bishop et al., 2004).

Present-moment attention involves self-regulation of attention to ensure it is maintained in the current moment (Bishop et al., 2004; Langer, 2014). By being present, and noticing, uncertainty is created. This uncertainty is an invitation to question beliefs that have been formed through prior experiences and expectations (Langer, 2014).

Non-judgement or acceptance of experiences involves curiosity and openness (Bishop et al., 2004). Through mindfulness thoughts and feelings are looked on as passing phenomena rather than true reflections of the individual or the situation. The act of observation introduces a space between how a thought is perceived and an automatic

reaction to it (Bishop et al., 2004). Mindfulness offers choice and possibilities as behaviour need not be predetermined by the past (Langer, 2014).

Whilst mindfulness is a recognised state on its own, its core components also form a category of meditation practice (Lutz et al., 2009). Mindfulness meditation typically consists of focusing on something specific such as the breath. Every time the mind naturally drifts away from the focus it is deliberately brought back with acceptance and non-judgement (Meiklejohn et al., 2012).

Mindfulness can be developed through a number of approaches such as mindfulness training, meditation and yoga (Vandana et al., 2017). It can be practiced in a number of ways such as through mindful walking, mindful listening, and mindfully experiencing the senses. Everyone has the ability to be mindful and it is more accessible when practiced daily.

How does it Work?

Neuroscience has found mindfulness training has a direct effect on areas of the brain that manage executive function and the regulation of emotions and behaviour (Meiklejohn et al., 2012). During meditation activity in the amygdala, which is responsible for emotional reactions such as anger, fear and sadness, is reduced (Arden, 2010). Simultaneously activity in the pre-frontal cortex which is the area that manages executive function and registers emotional regulation and the ability to self-soothe is activated (Arden, 2010). During times of stress the amygdala takes over from the executive function of our brain. This causes individuals to react emotionally rather than rationally to situations. Reactions of anger, frustration, and inability to make decisions can occur (Arden, 2010). Practicing mindfulness during times of stress has the ability to invoke calmness.

The frontal cortex is also associated with both higher-level thought and emotion. This association suggests intentional changes in thinking can lead to changes in emotion. It also suggests the way we feel can affect the way we think (Arden, 2010). Activity in the left prefrontal cortex is associated with happiness, and activity on the right with sadness (Arden 2010). Research shows that meditation, especially mindfulness meditation, can strengthen activity in the left prefrontal cortex and reduce activity in the right. Our 'set point' of happiness can be measured by the activity in our left prefrontal cortex (Arden, 2010). This suggests regular meditation can also lead to increases in happiness.

Through neuroplasticity the brain has the ability to create new neurons and neural connections (Arden, 2010). Regularly practicing meditation can strengthen positive neural pathways and create new ones to reduce reactions in times of stress.

Meditation can invoke the relaxation response which forms part of the parasympathetic nervous system and is the body's reaction when it needs to calm down. Abdominal breathing engages the parasympathetic nervous system which slows the heart rate and calms the amygdala which calms a person down. Prayer and meditation are recognised techniques to invoke this response. (Arden, 2010).

What are its Benefits?

Mindfulness programmes delivered in late adolescence (15-18 years), consisting of a variety of mindful activities, have been found to have a significant but small positive effect on mental health and well-being (Carsley et al., 2018; Klingbeil et al., 2017; Zenner et al., 2014; Zoogman et al., 2015). This is evident immediately post-programme, and several months later (Carsley et al., 2018). Some studies found a larger effect after a follow-up period in pre-post and controlled designs (Klingbeil et al., 2017).

Mindfulness-based interventions have been found to lead to moderate levels of increased mindfulness (Klingbeil et al., 2017). Mindfulness-based interventions have also been found to positively affect subjective wellbeing and physical health (Klingbeil et al., 2017). Mindfulness-based interventions have been found to decrease anxiety, depression and stress in youth participants (Kallapiran et al. 2015; Zenner et al. 2014). They have been linked to improvements in wellbeing, relatedness, emotional repair and improved relationships for youth (Lombas, 2019). They have been linked to reduced anger and aggression (Lombas, 2019; Vandana et al., 2017).

Emotion and behaviour regulation have been recorded as second-order treatment effects whereby gains in these domains are attributed to the gains in the increase in mindfulness (Klingbeil et al., 2017). Bishop et al., (2004) suggest improvements in emotional regulation are linked to the act of noticing emotions without reacting to them.

Langer (2014) suggests the effects of meditation are immediate, even for first-time meditators. The benefits not only facilitate calmness and improved self-regulation in the short term they are enduring and help individuals better manage the inevitable ups and downs in life (Langer, 2014). Regular and continued practice leads to a state of post

meditative mindfulness (Langer, 2014). Langer (2014) states that mindfulness and meditation are different ways to get to the same place.

During adolescence mindfulness training can cultivate specific skills such as self-regulation. This is achieved through strengthening executive control functions whilst simultaneously calming emotional centres (Oberle & Schonert-Reichl, 2014).

Self-Regulation

Self-regulation covers the domains of emotional and behavioural regulation. Emotional regulation is having control or influence over our emotions. It is considered a foundational aspect of wellbeing throughout life (Broderick et al., 2012; Metz et al., 2013). Behavioural regulation can be defined as the ability to act in our best interests, consistent with our core values.

In the short-term self-regulation is the control of impulses, attention or emotions, at the present point in time, or the near future. Long-term self-regulation relates to the control of emotions and/or behaviours over a longer time frame. It may also include a degree of planning (Moilanen, 2007).

In te ao Māori (the Māori world) emotions are closely connected to Wairau (spiritual wellbeing) (Pihama et al., 2018). In reference to emotions and feelings Māori use the term kare-a-roto meaning 'the ripples within' (Pihama et al., 2018). Pihama (2018) express that recognition and communication of emotions is vital for healthy relationships.

A number of domains can be called on when activating self-regulation. Calming oneself when experiencing tension (emotion regulation), focusing attention on the task at hand (attention regulation) and the use of physical strategies (behavioural regulation) (Moilanen, 2007).

Self-regulation is influenced by both top-down executive functions and bottom-up automatic processes. Through repeated cognitive reflection, regulatory processes such as mindfulness can become more conscious and controlled. These processes can however be overridden by automatic reactions of arousal and anxiety (Heatherton & Wagner, 2011).

Initial emotional regulation learning starts in childhood through children observing the behaviour of the adults in their lives, parental practices they experience and the emotional environment they live in (Morris et al., 2007).

Adolescence is a key period for developing emotional regulation (Morris et al., 2007). It is a window of opportunity where there is considerable developmental plasticity (Oberle & Schonert-Reichl, 2014). During adolescence neural regions in the prefrontal cortex associated with the regulation of emotion are continuing to develop (Morris et al., 2007). Research shows that the developmental period between 10 to 15 years of age is a time where the ability to self-regulate and exhibit inhibitory control increases (Mendelson et al., 2010).

The ability to regulate emotions is correlated with higher levels of social, emotional, and behavioural wellbeing (Mendelson et al., 2010). It is linked to wellbeing in the areas of positive and negative affect, emotional suffering and life satisfaction in adolescents (Liliana & Nicoleta, 2014). Emotional regulation is a foundational element for wellbeing. All areas of adolescent behaviour rely on it, such as decision making, learning, relationships and mental health (Broderick, 2012). Research on school-age children and youth found the more self-control they have the higher their subjective wellbeing is (Wiese et al., 2018).

Happiness

Happiness, also termed subjective wellbeing, refers to peoples cognitive and affective evaluation of their own lives. It includes satisfaction with life, and experiences of positive affect (positive emotion) and negative affect (negative emotion) (Diener, 2000).

Through her broaden-and-build theory, Fredrickson (2004), explains that positive emotions can be built through greater awareness and the thought-action processes. This process can loosen the hold a negative emotion has. Fredrickson offers that positive emotion can accumulate and compound over time to greatly affect us physically, mentally and socially. Seligman (2011, p.66) states positive emotion is more than the state of being happy, it indicates that growth and psychological capacity is building.

Happiness can be increased by practising gratitude, optimism and prosocial actions (Myers & Diener, 2018).

Chapter Three: Method

Chapter Overview

This chapter explains the methods used to conduct this research. Information about the participants and research materials is outlined. The procedure for conducting the research and the analysis of data is explained. This chapter concludes with comments on research quality and ethics.

Methodology

This research aimed to assess the effects of the 2019 Atawhai programme on a cohort of youth participants. The approach of an outcome evaluation was used. Outcome evaluations are used to determine how well an existing programme works in practice (Dahlberg & McCaig, 2016). The Kindness Institutes delivery of the Atawhai programme was evaluated using the three research questions forming the basis of this study. The Kindness Institutes goals, as identified in their Mission Statement (Appendix A) and Expected Outcomes (Appendix A), were consulted to achieve this and produce an evaluation that would provide the best benefit for The Kindness Institute.

This evaluation focused on empirical data, the views and experiences of the youth participants, their mentors, The Kindness Institute staff and volunteers, and the researcher.

A quasi-experimental pre-test-post-test design was used. Likert scale questionnaires, open-ended debrief questionnaires and researcher observations were used to obtain qualitative and quantitative data. A combination of both qualitative and quantitative data was used to interpret how knowledge was gained and used by rangatahi for any emotional or behavioural changes to their benefit.

A child-centred ecological perspective was adopted which considers multiple levels of analysis. This allowed the researcher to explore the effect of the Atawhai programme at the individual level to address objectives 1 and 2, and at the micro and meso-system levels to address objective 3. At the micro and meso-system levels, the researcher looked for any ripple effects the Atawhai programme had on rangatahis' families, schools, and their wider communities.

A control group was not included in this evaluation due to the ethical considerations involved with matching a marginalised youth population. It was decided it would also be unethical to recruit youth to undertake the research as a control, but not experience the Atawhai programme. It was decided that the rangatahi would be their own control in a repeated measures design, which included time periods without any input of the Atawhai programme. Data was collected in March 2019 and then April 2019 (with no Atawhai group contact in between), and again in September 2019 and October 2019 (with no Atawhai group contact in between). The control was that it was anticipated results would be the same, or similar, between the periods where there was no Atawhai group contact.

Participants

Thirteen mentors and eleven rangatahi were present on day-one of the October 2019 week-long intensive. Three of the mentors were Atawhai alumni, rangatahi who had previously completed a minimum of 12 months on the Atawhai programme.

Table 1 consists of fourteen names, which is inclusive of the eleven rangatahi and three alumni mentors. Of the fourteen, three identified as male and eleven as female.

The fourteen rangatahi were aged between 14 and 18 years. The ethnicity of the youth was Māori, Samoan, Cook Island and Tuvaluan.

During the week-long intensive one rangatahi and one alumni mentor removed themselves from the programme. Twelve rangatahi completed Atawhai October 2019.

Table 1

Participants that started the Atawhai October 2019 week-long intensive and their Atawhai engagement

Avatar	Atawhai engagement
Kiwi	Over 12 months
Kākāpō	Over 12 months
Tūi	Over 12 months
Kea	Over 12 months
Takahē	Since April-2019
Kererū	Since April-2019
Korimako	Since April-2019
Pūkeko	Since April-2019
Kākā	Since September-2019
Pīwakawaka	Since September-2019
Weka	Since September-2019
Hoiho	Since September-2019
Miromiro	Exited October-2019
Kōtare	Exited October-2019

Note. Fourteen Atawhai youth participants (rangatahi) whose data was used in this evaluation, listed by their Avatar name (assigned to them by the researcher to assure anonymity), and their Atawhai engagement.

Materials

Likert Scale Questionnaires. Shortened versions of three well-known Likert scale questionnaires were used to measure mindfulness, self-regulation and happiness.

The questionnaires were ‘Five Facet Mindfulness Questionnaire (FFMQ)’, ‘Adolescent Self-Regulatory Inventory (ASRI)’ and ‘The Oxford Happiness Questionnaire (OHQ)’. Ten questions from each of the three original questionnaires were selected by the researcher to form a one-page thirty-item questionnaire that was presented to participants (Appendix C). Questions 1-10 were from the FFMQ, questions 11-20 from the OHQ and questions 21-30 from the ASRI.

The original questionnaires were shortened as this was a co-research project with another student (White, 2020) who compiled a twenty-five-item questionnaire on compassion and anxiety (Appendix D). Both researchers compiled shortened questionnaires to attempt to alleviate respondent fatigue. This is where participants lose attention and motivation whilst completing research tasks and the quality of their data deteriorates (Lavrakas, 2008).

A 5-point Likert scale format was used on both researcher's questionnaires with responses ranging from 1 = I have never thought or felt like this in the last week, to 5 = I have always thought or felt like this in the last week.

Mindfulness was assessed with the 'Five Facet Mindfulness Questionnaire (FFMQ)'. The five facets are: Act with Awareness, Describe, Nonjudge, Nonreact and Observe. This questionnaire is designed to measure changes in mindfulness levels expected from regular long-term training. An overall score of the five facets gives an indication of how effective a mindfulness practice is. The original FFMQ is a 39-item questionnaire but shortened versions ranging from 15-items to 24-items have been used in previous research (Medvedev et al., 2018). Two questions were selected from each of the five facets to make up the 10-item questionnaire used in this research project. Examples of the questions used are "I'm good at finding words to describe my feelings" and "I make judgements about whether my thoughts are good or bad". Some of the ten questions were simplified to accommodate a potentially under-performing youth population e.g. "I rush through activities without being really attentive to them" was changed to "I rush through activities without taking notice of them". The 'Five Facet Mindfulness Questionnaire' has previously been administered to youth aged 17 years (Medvedev et al., 2018).

Self-Regulation was measured by the 'Adolescent Self-Regulatory Inventory (ASRI)'. This 40-item questionnaire was designed to measure both short and long-term self-regulation through a number of components and domains. The components are monitoring, activating, adapting, persevering and inhibiting. These components are used to determine adolescents' success or failure in self-regulation. The domains measured are emotional, behavioural, attentional and cognitive (Moilanen, 2007). Only long-term self-regulation questions were used for the purposes of this research. Of the 14 specific long-term self-regulation items ten were used. A sample of questions is "If something isn't going according to my plans, I change my actions to try and reach my goal" and "I am usually aware of my

feelings before I let them out”. Two of the ten questions were modified to accommodate our specific youth population e.g. “In class, I can concentrate on my work even if my friends are talking” was changed to “In class, or at work, I can concentrate on my tasks even if my friends are talking”. The ASRI has been administered to youth aged 11 years (Moilanen, 2007).

Happiness was measured by ‘The Oxford Happiness Questionnaire (OHQ)’. This 29-item questionnaire measures psychological wellbeing (Hills & Argyle, 2002). A sample of questions used is “I have warm feelings to almost everyone” and “I do not think that the world is a good place”. Three of the ten questions were modified to accommodate a potentially underperforming youth population e.g. “I feel that I am not especially in control of my life” was changed to “I feel that I am not always in control of my life”. A short-form version of the OHP of eight-items has been used in previous research when time and space is limited (Hills & Argyle, 2002). It is worth noting there has been some criticism of the OHQ. Kashdan (2004) suggests that some items measure character traits and attributes which may not relate to subjective wellbeing. Table 2 provides a list of the items used in this research that are in question.

Table 2

Questions from the Oxford Happiness Questionnaire that Kasdan (2004) suggests relate to character traits and attributes

Item No.	Question	Construct being assessed
12 (4)	I have warm feelings towards almost everyone	Kindness/Agreeableness
14 (11)	I laugh a lot	Humour
18 (19)	I feel that I am not always in control of my life	Autonomy/Locus of control
19 (20)	I feel able to take on anything	Self-Efficacy

Note. Data under the columns titled “Item No.” and “Question” are taken from the questionnaires used in this research. Item numbers in parentheses refer to the question number from the 29-item version of the Oxford Happiness Questionnaire (Hills & Argyle, 2002). The column for “Construct being assessed” is the interpretation by Kashdan (2004) of what the question actually measures.

Debrief Questionnaires. Daily debrief questionnaires and deep debrief questionnaires, both consisting of open-ended questions, were used to explore both rangatahi and mentor's experiences of the Atawhai October 2019 week-long intensive. Debrief questionnaires have been used previously by The Kindness Institute to evaluate Atawhai programmes. For Atawhai October 2019 there was collaboration between The Kindness Institute Director and the researcher in compiling the debrief questions. The researcher was particularly interested in including questions about how the rangatahi might be using the strategies and skills they had been taught at Atawhai, outside the Atawhai environment.

The rangatahi daily debrief questionnaire (Appendix E) explored rangatahi's experiences whilst at the week-long intensive and their thoughts on the programme content. It asked what rangatahi were proud of having done each day and how they intended to challenge themselves the following day. The rangatahi deep debrief questionnaire (Appendix F) explored how rangatahi feel after a week at Atawhai, what they had learned, and if, and how, they were using the strategies and skills they were taught.

The mentor daily debrief questionnaires asked mentors about theirs and their rangatahi's experiences whilst at the week-long intensive. It asked mentors if there was any areas where they needed support. A mentor daily debrief questionnaire has not been included in the appendix. Although set questions were asked of mentors their answers were discussed in an open forum rather than written on a questionnaire, as was the case with the rangatahi. The mentor deep debrief questionnaires (Appendix G) focussed on any change mentors had noticed in their rangatahi during the week at Atawhai, if they thought rangatahi had benefitted from the programme, and if they knew whether the rangatahi were using the strategies and skills they were taught outside the Atawhai programme. Mentors were also invited to share their own personal experiences from the week. Answers for the mentor deep debrief questionnaires were accepted in written form.

Observation. An open participation observation approach was used by the researcher during the stages she was present at Atawhai (Table 3). Participation observation is where the researcher is directly involved in the activities of the group (Dahlberg & McCaig, 2016). Open participation is where participants are aware the researcher is involved with the group in a research capacity (Dahlberg & McCaig, 2016). It is possible for the

researcher to have an impact on the group, and therefore the research, through this method (Dahlberg & McCaig, 2016). Despite this the researcher felt it was necessary to immerse herself in the day-to-day activities at Atawhai in order to come away with a deeper and richer understanding of the Atawhai 2019 programme.

Atawhai Documents. The Kindness Institute provided the researcher with access to a number of Atawhai programme documents. These helped to give background to the Atawhai programme and provide the researcher with an informed view of the Atawhai model.

Procedure

Table 3 provides a timeline of the Atawhai stages, indicates when the researcher was present, and identifies the research materials used at each stage.

Rangatahi were briefed on this research project at the March 2019 one-day wānanga prior to the April 2019 week-long intensive.

Rangatahi and their parents were given an information sheet (Appendix H) and consent form (Appendix I) detailing the process for this evaluation. They were advised that participation in the evaluation was voluntary and that they may withdraw from the evaluation up to a week after they completed the questionnaires. Both parents and rangatahi signed a consent form to agree to rangatahi taking part in this evaluation.

Rangatahi completed the first set of Likert scale questionnaires (Appendix C & D) at the March 2019 one-day wānanga. An instruction sheet was supplied with the questionnaires that explained the Likert scale (Appendix B). The same Likert scale questionnaires were completed by rangatahi a further six times between March 2019 and December 2019 (Table 3).

The researcher attended the first hour of a one-day wānanga in September 2019 to meet the mentors and introduce the research project to them. Mentors were further briefed on their part in the research at the two-day mentor training held in October 2019, immediately prior to the October 2019 week-long intensive. The researcher attended both of these training days.

The researcher attended every day of the October 2019 week-long intensive. Mentors were given an information sheet (Appendix J) and consent form (Appendix K) at the

October 2019 week-long intensive. They were advised that participation in this evaluation was voluntary and that they may withdraw from the evaluation up to a week after they completed the deep debrief questionnaires. All mentors signed consent forms to take part in this evaluation.

Mentors were matched with their rangatahi on day one of the October 2019 week-long intensive. They had previously met the rangatahi as a group at the September 2019 one-day wānanga. Both mentors and rangatahi completed debrief questionnaires daily during the October 2019 week-long intensive. The dates are indicated on Table 3.

Observations by the researcher took place at every stage of contact she had at Atawhai from Orientation 2 in September 2019 to Follow up in December 2019.

In Table 3 below where an Atawhai Stage is preceded by a number (1 to 7) this indicates the Likert scale questionnaires were completed by rangatahi on these days. A number has not been assigned to the two Mentor Training days as rangatahi were not present and therefore did not complete questionnaires. Likert scale questionnaires were not completed on days 2 through 5 of the October week-long intensive.

Table 3*Timeline of data collected at Atawhai stages*

Atawhai Stage	Date	Likert scale questionnaires (Rangatahi)	Debrief questionnaires (Rangatahi and Mentors)	Observation (Researcher present at Atawhai)
1. Orientation 1	Mar 2019	Yes		
2. Pre-Atawhai 1 (Day 1)	Apr 2019	Yes		
3. Post-Atawhai 1 (Day 6)	Apr 2019	Yes		
4. Orientation 2	Sep 2019	Yes		Yes
Mentor Training (Day 1)	Oct 2019			Yes
Mentor Training (Day 2)	Oct 2019			Yes
5. Pre-Atawhai 2 (Day 1)	Oct 2019	Yes	Yes	Yes
(Day 2)	Oct 2019		Yes	Yes
(Day 3)	Oct 2019		Yes	Yes
(Day 4)	Oct 2019		Yes	Yes
(Day 5)	Oct 2019		Yes	Yes
6. Post-Atawhai 2 (Day 6)	Oct 2019	Yes		Yes
7. Follow Up	Dec 2019	Yes		Yes

Note: Timeline of the three types of data collected at the seven stages of Atawhai. It includes the researcher's attendance during the seven Atawhai stages and two Mentor Training Days.

Materials

Likert Scale Questionnaires. Likert scale questionnaires on Mindfulness, Self-regulation, Happiness, Compassion and Anxiety were used for data collection.

Rangatahi chose an avatar to use on their Likert scale questionnaires. The Kindness Institute kept a record of rangatahi's names and their avatar. During the data analysis phase the researcher assigned new avatars to each rangatahi in order to maintain their anonymity.

Rangatahi were advised there were no right or wrong answers to the questions, and that answers were to reflect how they thought or felt in the past week. The researcher was

not present in the room when rangatahi answered the questionnaires. This was intended to mitigate any researcher effects that may arise (Dahlberg & McCaig, 2016). Mentors were available should rangatahi need help with interpreting a question. Mentors were instructed they could help with clarification of the meaning of words should they be asked. At each instance of the questionnaire administration participants were asked to take their time with each question. In total the Likert scale questionnaires were completed by rangatahi at seven Atawhai stages (Table 3), over the course of nine months, to measure potential changes over time. This was intended to explore if on-going attendance at Atawhai leads to greater gains from the programme.

Debrief Questionnaires. Both rangatahi and mentors completed daily debrief questionnaires on days one to four of the October 2019 week-long intensive. On the fifth day they completed deep debrief questionnaires which covered their experiences over the previous week. Debrief questionnaires were completed at the end of each day.

Observation. The researcher was present during a number of stages of the Atawhai programme (Table 3).

During the researchers briefing to rangatahi and mentors about the research she explained it was the Atawhai programme that was being evaluated and not the rangatahi themselves. The researcher explained that any observations she recorded would be programme related.

The researcher attended and participated in the two-day mentor training in October 2019 which commenced immediately prior to the commencement of the week-long October 2019 intensive.

The researcher also attended the week-long intensive in October 2019 and the performance evening on the final day of the October 2019 intensive. The researcher carried out observations daily from day one to day six of the October 2019 week-long intensive. On a number of occasions she took part in the mindfulness, meditation, yoga and games. Observation notes were taken during some of the Atawhai sessions but in instances where the researcher participated notes were recorded post-session. Observation notes regarding the final performance were recorded post-performance. The researcher took great care when writing observation notes during Atawhai sessions. Notes were only taken when the

group was practicing together. Notes were not taken when mentors were working individually with their rangatahi, nor when rangatahi were practicing their pieces for the performance. The researcher did not want her presence to be intrusive and affect the rangatahi and mentor's involvement in the programme.

The researcher was also present in the capacity of an Atawhai volunteer throughout the October week-long intensive, including the final performance night. She completed The Kindness Institutes volunteer application form, supplied referees and was Police vetted in order to fulfil the requirements of the volunteer role. Her volunteer duties included taking notes on the teaching lessons in order to contribute to a teaching manual for The Kindness Institute, and note taking on progress of youth on their goals. The researcher also helped out daily with food preparation and clean-down with other volunteers, mentors and rangatahi.

Atawhai Documents. Due to considerations of intellectual property, and protecting the specific content of the Atawhai programme, the contents of Atawhai documents were not subject to this evaluation process. The documents were solely used by the researcher to increase her understanding of the Atawhai programme.

Data Analysis

Materials

Likert Scale Questionnaires. Data for the Likert scale questionnaires on Mindfulness, Self-Regulation, Happiness, Compassion and Anxiety was analysed through SPSS version 25 software. Individual and group scores were compared for the seven stages the questionnaires were completed between March 2019 and December 2019.

In order to undertake repeated measure analysis, in instances where a data point was missing (less than 5%), it was replaced with the group mean.

Debrief Questionnaires. Rangatahi and mentors wrote their responses for the daily and deep debrief questionnaires. Responses were typed up by the researcher at the end of each day and compiled into separate word documents for mentors and rangatahi by day completed. Responses were used to support the findings from the Likert scale questionnaires. They were also used to provide context and explore common themes for

inclusion in the findings section, such as the use of mindfulness-based skills outside the Atawhai programme.

Observation. Observation notes by the researcher have been used to provide the reader with context around the Atawhai programme in regard to culture. The notes also report on the final performance on the last day of the October 2019 intensive, and other elements of the programme not captured by the Likert scale and debrief questionnaires.

Atawhai Documents. The content of Atawhai documents was not evaluated in this research. However information of a general nature, sourced via email contact with The Kindness Institute or through The Kindness Institute's publicly accessible website, has been cited where relevant.

Quality

To ensure good and consistent quality research the following processes occurred. The methods were clearly explained to the research participants. This was achieved through providing participants with detailed information sheets and clear consent forms. Participants were also briefed on the research process by the researcher on two separate occasions. Consistent methods were undertaken during the multiple rounds of Likert scale and debrief questionnaire completion.

Ethics

Approval for this research was gained from The University of Waikato Human Research Ethics Committee (Appendix L). The research was welcomed and endorsed by The Kindness Institute Director and The Kindness Institute Board (Appendix M).

Due to this research focusing on human participants, including a youth population, the researcher adopted a position of paramount safety for the participants. The names of youth and their mentors have not been used in the write up of this evaluation. Youth have been given an avatar name to anonymise them.

Informed consent for youth participation was gained in written form from the rangatahi themselves and their parents or caregivers. Informed consent was also gained in written form from mentors.

Chapter Four: Results

Chapter Overview

This chapter presents the findings from data collection and analysis. Findings are presented below in both quantitative and qualitative data formats.

The chapter begins with some observations from the researcher, supported by participant comments, in regard to the overall culture of the Atawhai programme.

Quantitative data is then presented in the form of boxplot graphs, (Figures 4 to 8) and z-score tables (Figures 9 and 10). The Figures represent Atawhai participants self-reported responses to the questionnaires on the variables' mindfulness, self-regulation, happiness, compassion and anxiety. The boxplot graphs represent data at the group level. The z-score tables represent individual responses, measures in standard deviations above or below the group means. Following the z-score tables are narrative accounts from both mentors and rangatahi to support the quantitative data (Figures 11 to 14). This section of the results addresses research questions 1 and 2.

Following this further qualitative data is presented in regard to youth sharing the mindfulness-based skills they learned with their whānau and wider communities. This section addresses research question 3.

Further observations from the researcher regarding specific parts of the programme such as connection with nature, games, and the performance event are included.

This chapter concludes with a table displaying examples of the Atawhai Expected Outcomes (Appendix A) being met.

Researchers General Observations

Rangatahi

Whilst the scope of this thesis did not involve exploring the environments that rangatahi live and operate in it was evident that this group experiences stressful circumstances and environmental influences.

The following examples are taken from debriefs and comments made when we came together as a group.

A number of the rangatahi talked about tiredness and not getting enough sleep. One rangatahi was tired one day as she had to look after her siblings when her parents worked night shift. Another rangatahi mentioned they only had three hours sleep one night.

One rangatahi brought younger siblings to one day of the October 2019 week-long intensive. The researcher did not query why this was but suspect in order for the rangatahi to attend Atawhai she needed to bring her siblings with her. As is the inclusive culture at Atawhai the rangatahi and siblings were welcomed for the duration of the day.

One rangatahi had a parent living with a disease, another's family was trying to secure a stable living arrangement. Two rangatahi identified with the LGBTQ+ community.

Rangatahi also commented in general about experiencing stress and stressful situations.

Atawhai Culture

Te Whare Tapa Whā. A main theme that emerged from Atawhai is that culture is important. The Te Whare Tapa Whā framework developed by Mason Durie (1985) underpins Atawhai. It is a tool rangatahi are encouraged to use daily to self-measure their wellbeing. During the week-long intensive, through the daily debrief questionnaire (Appendix E), rangatahi explored which taha (dimension, domain) of Te Whare Tapa Whā they connected to that day, and why. They noted which one needed strengthening and how Atawhai staff could help. As mentioned in the literature review the taha's are wairua (spirit), hinengaro (mind), tinana (physical) and whānau (family). To follow are some of the responses from rangatahi.

"I do feel most connected to my culture because Māori has been intertwined with Atawhai" (Kererū, day 5)

"I've been using the whare tapa wha to connect to my Māoritanga [Māori culture, traditions, and way of life]" (Pīwakawaka, day 5)

"I feel so much more connected to my māori culture because of the tai chi [Mau rākau]" (Hoiho, day 5)

Rangatahi talked about connecting to ancestors.

“When we were learning all the nekehanga [movements] for mau rākau [traditional Māori martial art] I felt my ancestors around me and could feel their guidance” (Kākā, day 2)

Te Reo. Throughout the Atawhai programme phrases in te reo (the Māori language) were frequently spoken. On day one of the week-long October 2019 intensive, two rangatahi wrote their answers to the debrief questions in te reo.

The use of a number of te reo words became an integral part of the Atawhai programme. The reader will find their translation to English in the glossary and also in brackets next to the first time they are mentioned. Two words in particular stood out for the researcher. These were whānau and tautoko (support).

Whānau. Whānau was regularly used throughout the day by The Kindness Institute staff, volunteers and rangatahi to refer to the collective Atawhai group. The words ‘kei te pai whānau’ meaning ‘you are doing well family’ was often spoken. Whānau is commonly used to refer to the extended family by Māori. It was used at Atawhai in reference to kaupapa whānau. This is a family that is not connected by whakapapa (kinship) but by a shared kaupapa (purpose), values and support network (Pihama et al., 2018). One rangatahi made the following comment

“I felt most connected to taha whānau because I really got to know everyone a bit more and there was a lot of whakawhanaungatanga [process of establishing relationships, relating well to others]” (Kaka, day 4)

Tautoko. Tautoko means support in te reo (the Māori language). This word became a slogan for the October 2019 week-long intensive. The rangatahi took this word and shortened it to tautoks. Often when a task or activity was completed the word tautoks would ring out in the room from rangatahi, mentors and staff. On Day 4 when the rangatahi were practicing their pieces for the Saturday night performance the word tautoks was shouted in appreciation and support after every act, followed by applause and laughter.

Rangatahi commented about support at Atawhai in the following ways.

“Atawhai is a supporting calm place to be” (Weka, day 5)

“I feel more like myself knowing that there’s people that are supporting me” (Hoiho, day 5)

Mentors

The Atawhai mentoring model is designed to accommodate the needs and situations of rangatahi which may change from day to day. There was a mix of male and female mentors. Due to their being more male mentors than male rangatahi, in a number of instances female rangatahi were assigned a male mentor. For the October 2019 week-long intensive three Atawhai Alumni were mentors.

The Atawhai mentoring model was flexible and adaptable. This is highlighted in the examples below. Whilst mentors were individually assigned to a rangatahi for the duration of the Atawhai week it was not uncommon for rangatahi to work with different mentors from time to time. For example two mentors helped their rangatahi choreograph a dance routine for the Saturday night performance. At times other rangatahi would join the dance practices. When this happened their assigned mentors would support them with encouragement.

The mentor whose rangatahi exited Atawhai during the week remained on the programme and remained actively involved. He continued to take part in the daily mentor debriefs and he took on a new role of Director of the Saturday night performance.

On a couple of occasions mentors took rangatahi offsite in order to teach them a new skill or introduce them to a new experience. On one occasion a mentor who was an art teacher took her rangatahi to her school where they worked on some pieces of art for the performance. Another mentor was a writer and director and he took his rangatahi to an evening film shoot.

Quantitative and Qualitative Data

Participants

The following boxplots and z-score tables represent data from a total of twelve rangatahi. Four participants had their first group contact with the Atawhai programme in

March 2019 (Orientation 1). Four had their first group contact in September 2019 (Orientation 2). The remaining four started prior to March 2019 and have been on the Atawhai programme for over twelve months. Where comparisons are made over the nine months, from March 2019 to December 2019, only the data for the eight participants that were present during this full time is included.

Boxplot Graphs

The boxplot graphs (Figures 4 to 8) represent the Atawhai participants (N=8) questionnaire responses as a group. The boxplots are: Mindfulness (Figure 1); Self-Regulation (Figure 2); Happiness (Figure 3); Compassion (Figure 4); Composite Positive Emotions (Mindfulness, Self-Regulation, Happiness and Compassion) represented with Anxiety (Figure 5).

The box plots can be interpreted as follows.

The y-axis is numbered from 1 to 5 to reflect the scale of responses offered to participants in the questionnaires. The scales are consistent for each of the five variables where 1 = I have never thought or felt like this in the last week, 2 = I have rarely thought or felt like this in the last week, 3 = I have sometimes thought or felt like this in the last week, 4 = I have often thought or felt like this in the last week and 5 = I have always thought or felt like this in the last week.

The x-axis represents the seven Atawhai stages (Table 3) where participants experienced contact with the Atawhai programme as a group. At each of the seven stages participants completed the questionnaires on the five variables. Orientation 1, in March 2019, was the first day of group contact for four of the eight participants. Four new participants joined the group at Orientation 2. The inclusion of four new participants took the total number of participants from eight to twelve for the remainder of the programme. The overall time period covered by the x-axis is 9 months.

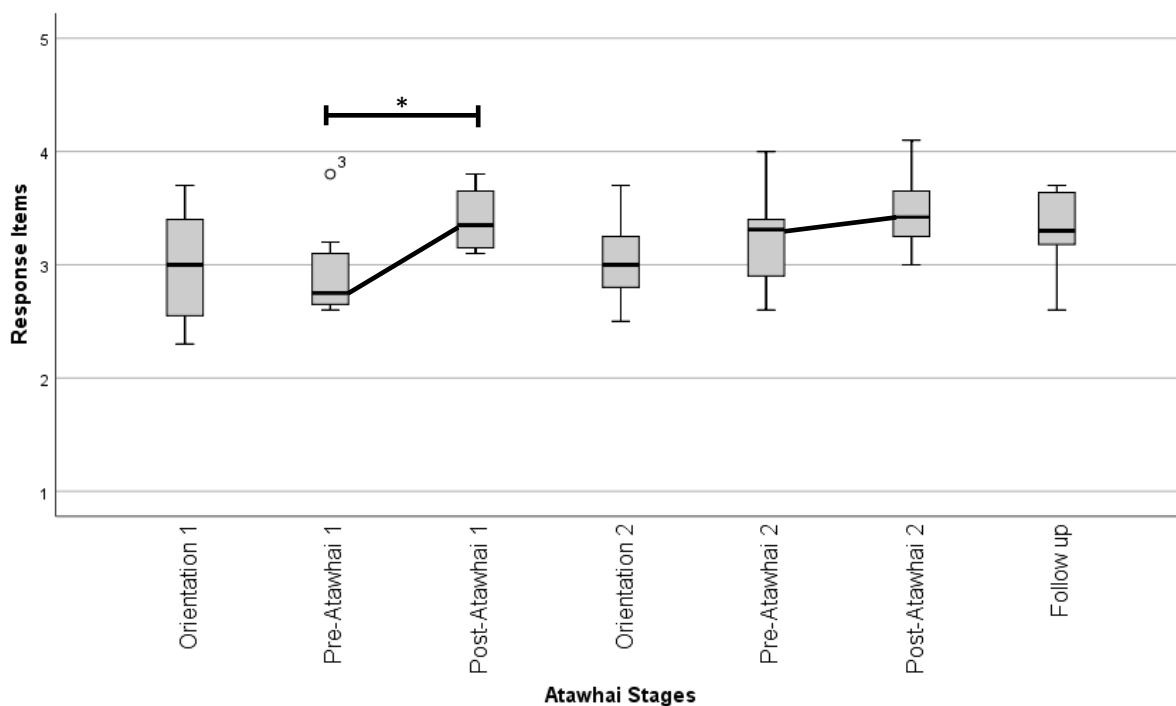
The seven bars in the box plots indicate the data range for the group including the means (horizontal lines), 25 and 75 percent quartiles (box boundaries) and 95% confidence intervals (error bars). Significant results are shown with a horizontal line indicating either one asterisk (*) where $p < 0.05$ or two asterisks (**) where $p < 0.01$.

The lines connecting Pre-Atawhai 1 and Post-Atawhai 1, and Pre-Atawhai 2 and Post-Atawhai 2 represent the continuous daily contact participants had over these time periods. In both instances Pre indicates day one of a week-long intensive and Post indicates day six.

Outliers are identified as a small circle (o) for “out” values and a star (★) for “extreme values”. The small circle or star is followed by a number which corresponds to a participant’s case number. Outliers are points that lie outside the box boundaries (and therefore the overall pattern of distribution) by 1.5 times (small circle) or 3 times (star).

Figure 1

Self-Reported Mindfulness Levels as a Function of Time at Atawhai



Note. Figure 1 demonstrates a boxplot of group mindfulness scores measured over time (stages) at Atawhai. The box indicates the means (horizontal lines), 25 and 75 percent quartiles (box boundaries) and 95% confidence intervals (error bars); * $p < 0.05$.

Figure 1 represents the Atawhai groups self-reported mindfulness levels recorded at the seven stages during their nine-month participation on the Atawhai programme. It shows an increase in mindfulness over the total nine-month period, from Orientation 1 in March 2019 ($M = 2.99$, $SD = 0.50$, $n = 8$) to Follow up in December 2019 ($M = 3.21$, $SD = 0.34$, $n =$

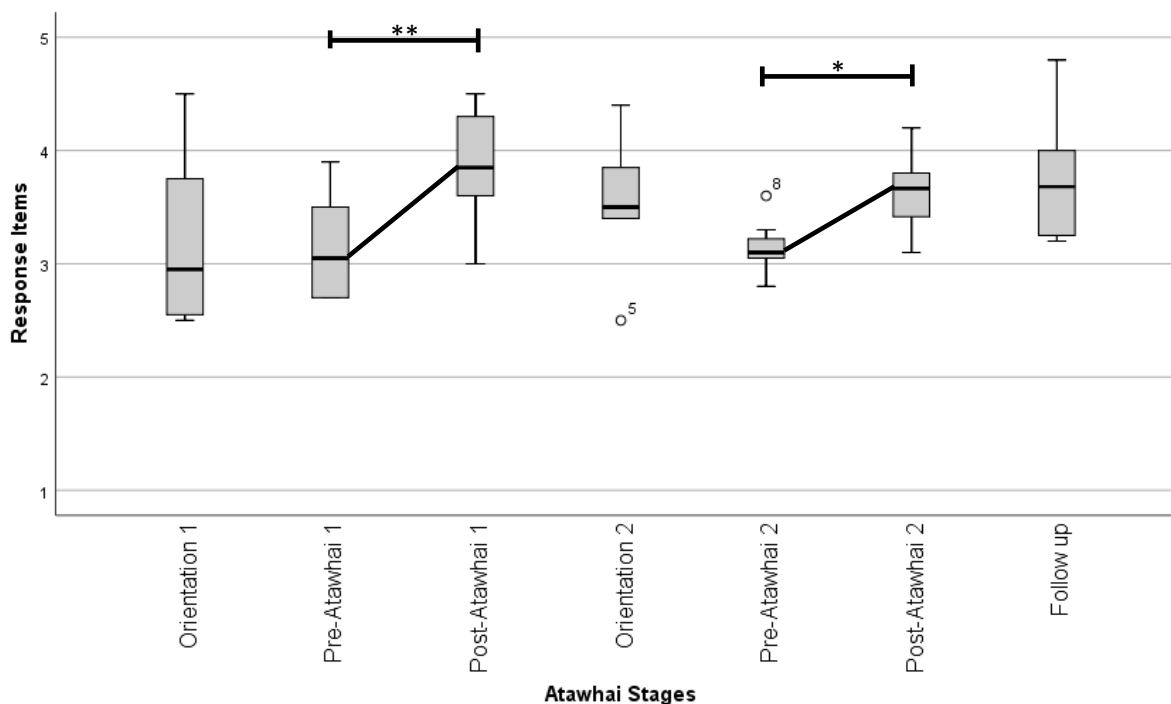
12). It shows an increase in mindfulness during the two week-long intensives from Pre-Atawhai 1 ($M = 2.93, SD = 0.41, n = 8$) to Post-Atawhai 1 ($M = 3.40, SD = 0.28, n = 8$), and Pre-Atawhai 2 ($M = 3.20, SD = 0.42, n = 12$) to Post-Atawhai 2 ($M = 3.45, SD = 0.35, n = 12$).

A one-way analysis of variance (ANOVA) with repeated measures was conducted to determine the significance of the change in mindfulness during the total nine-month period (Orientation 1 to Follow up). The group means from each of the seven Atawhai stages were compared to determine the overall impact. As this is a comparison test only the results for the eight participants that attended every stage of Atawhai were used. Results indicate that contact with the Atawhai programme has a significant impact on participants mindfulness levels, $F(6, 42) = 4.329, p = 0.002$. There is a significant within-subjects linear effect which can be seen by the results trending upwards over the total nine-month period (Orientation 1 to Follow up), $F(1,7) = 14.517, p = 0.007, \eta = 0.382$.

Post hoc paired-sample t-tests were conducted to explore at which stage in particular the significant changes in mindfulness took place. Mindfulness levels were compared from the first day (Pre-Atawhai 1) to the last day (Post-Atawhai 1) of the April 2019 intensive, and the first day (Pre-Atawhai 2) to the last day (Post-Atawhai 2) of the October 2019 intensive. Mindfulness levels were also compared from the first one-day wānanga (Orientation 1) to the last one-day wānanga (Follow up). Results indicate a statistically significant increase in mindfulness for the eight participants that attended the week-long April 2019 intensive from Pre-Atawhai 1 to Post-Atawhai 1, $t(7) = -2.747, p = 0.029$, with a large effect size $d = 0.971$. Results indicate a marginally significant increase in mindfulness for the twelve participants that attended the week-long October 2019 intensive from Pre-Atawhai 2 to Post-Atawhai 2, $t(11) = -1.976, p = .074$, with a medium effect size $d = 0.571$ (It should be noted that this test was also conducted using only the data from the eight participants who attended every Atawhai stage, $t(7) = -1.970, p = 0.089, d = 0.697$. Comparison of the scores between the eight and twelve participants indicates a greater significance and larger effect was found with the full complement of twelve participants). Results indicate that between Orientation 1 in March 2019 to Follow up in December 2019 there was a marginally significant increase in mindfulness for the eight participants that participated at every Atawhai stage, $t(7) = -1.989, p = 0.087$, with a medium effect size $d = 0.703$.

Figure 2

Self-Reported Self-Regulation Levels as a Function of Time at Atawhai



Note. Figure 2 demonstrates a boxplot of overall self-regulation scores measured over time at Atawhai. The box indicates the means (horizontal lines), 25% and 75% quartiles (box boundaries) and 95% confidence intervals (error bars); * $p < 0.05$, ** $p < 0.01$.

Figure 2 represents Atawhai participants self-reported self-regulation levels recorded at the seven stages during their nine-month participation on the Atawhai programme. It shows an increase in self-regulation over the total nine-month period from Orientation 1 in March 2019 ($M = 3.19$, $SD = 0.79$, $n = 8$) to Follow up in December 2019 ($M = 3.66$, $SD = 0.50$, $n = 12$). It shows an increase in self-regulation during the two week-long intensives from Pre-Atawhai 1 ($M = 3.14$, $SD = 0.48$, $n = 8$) to Post-Atawhai 1 ($M = 3.88$, $SD = 0.51$, $n = 8$) and Pre-Atawhai 2 ($M = 3.20$, $SD = 0.39$, $n = 12$) to Post-Atawhai 2 ($M = 3.56$, $SD = 0.45$, $n = 12$).

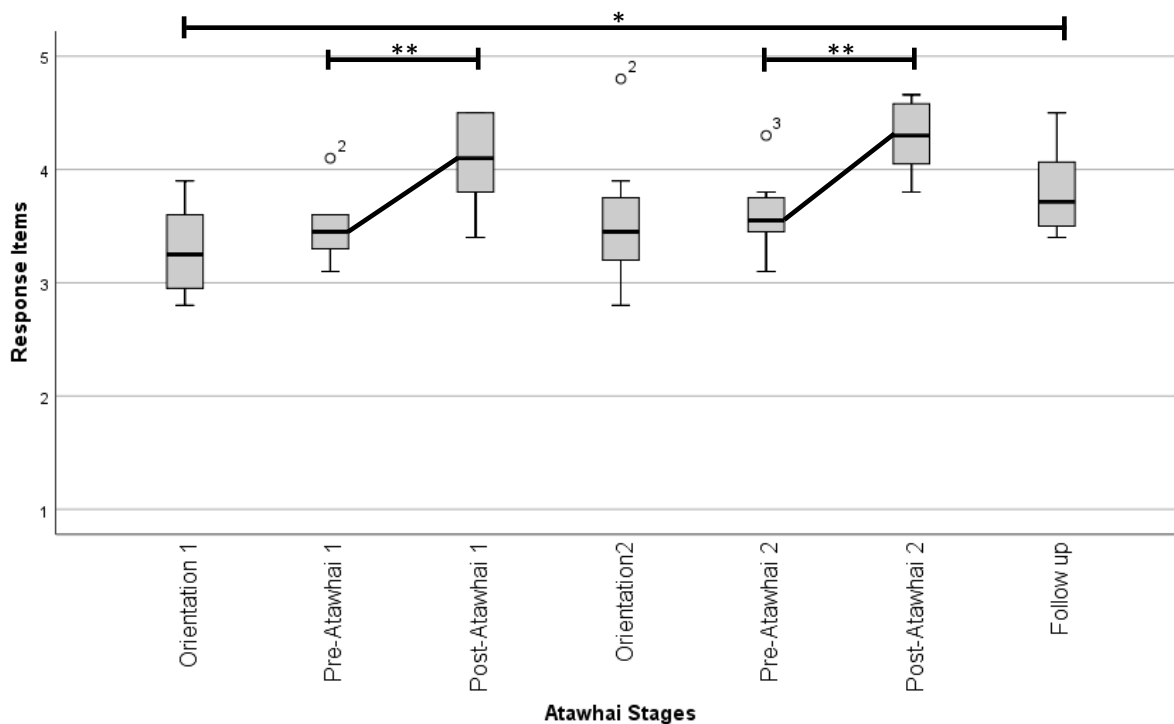
A one-way analysis of variance (ANOVA) with repeated measures was conducted to determine the significance of the change in self-regulation during the total nine-month period (Orientation 1 to Follow up). The groups means from each of the seven Atawhai stages were compared to determine the overall impact. As this is a comparison test only the results for the eight participants that attended every stage of Atawhai were used. Results indicate that contact with the Atawhai programme had a significant impact on participants

self-regulation levels, $F(6, 42) = 3.882, p = 0.004$. The within-subjects linear effect size trends upwards over the total nine-month period (Orientation 1 to Follow up) but did not reach significance, $F(1,7) = 1.566, p = 0.251$.

Paired-sample t-tests were conducted to explore at which stage in particular the significant changes in self-regulation took place. Self-regulation levels were compared from the first day (Pre-Atawhai 1) to the last day (Post-Atawhai 1) of the April 2019 intensive, and the first day (Pre-Atawhai 2) to the last day (Post-Atawhai 2) of the October 2019 intensive. Self-regulation levels were also compared from the first one-day wānanga (Orientation 1) to the last one-day wānanga (Follow up). Results indicate a significant increase in self-regulation for the eight participants that attended the week-long April 2019 intensive from Pre-Atawhai 1 to Post-Atawhai 1, $t(7) = -4.285, p = 0.004$, with a large effect size $d = 1.51$. Results indicate a significant increase in self-regulation with a large effect for the twelve participants that attended the week-long October 2019 intensive from Pre-Atawhai 2 to Post-Atawhai 2, $t(11) = -2.671, p = 0.022, d = 0.771$. Results indicate that between Orientation 1 in March 2019 to Follow up in December 2019 there was not a significant increase in self-regulation for the eight participants that participated at every Atawhai stage $t(7) = -1.408, p = 0.202$.

Figure 3

Self-Reported Happiness Levels as a Function of Time at Atawhai



Note. Figure 3 demonstrates a boxplot of overall happiness scores measured over time at Atawhai. The box indicates the means (horizontal lines), 25% and 75% quartiles (box boundaries) and 95% confidence intervals (error bars); * $p < 0.05$, ** $p < 0.01$.

Figure 3 represents Atawhai participants self-reported happiness levels recorded at the seven stages during their nine-month participation on the Atawhai programme. It shows an increase in happiness over the total nine-month period from Orientation 1 in March 2019 ($M = 3.29$, $SD = 0.41$, $n = 8$) to Follow up in December 2019 ($M = 3.73$, $SD = 0.36$, $n = 12$). It shows an increase in happiness during the two week-long intensives from Pre-Atawhai 1 ($M = 3.49$, $SD = 0.30$, $n = 8$) to Post-Atawhai 1 ($M = 4.09$, $SD = 0.41$, $n = 8$) and Pre-Atawhai 2 ($M = 3.55$, $SD = 0.31$, $n = 12$) to Post-Atawhai 2 ($M = 4.18$, $SD = 0.31$, $n = 12$).

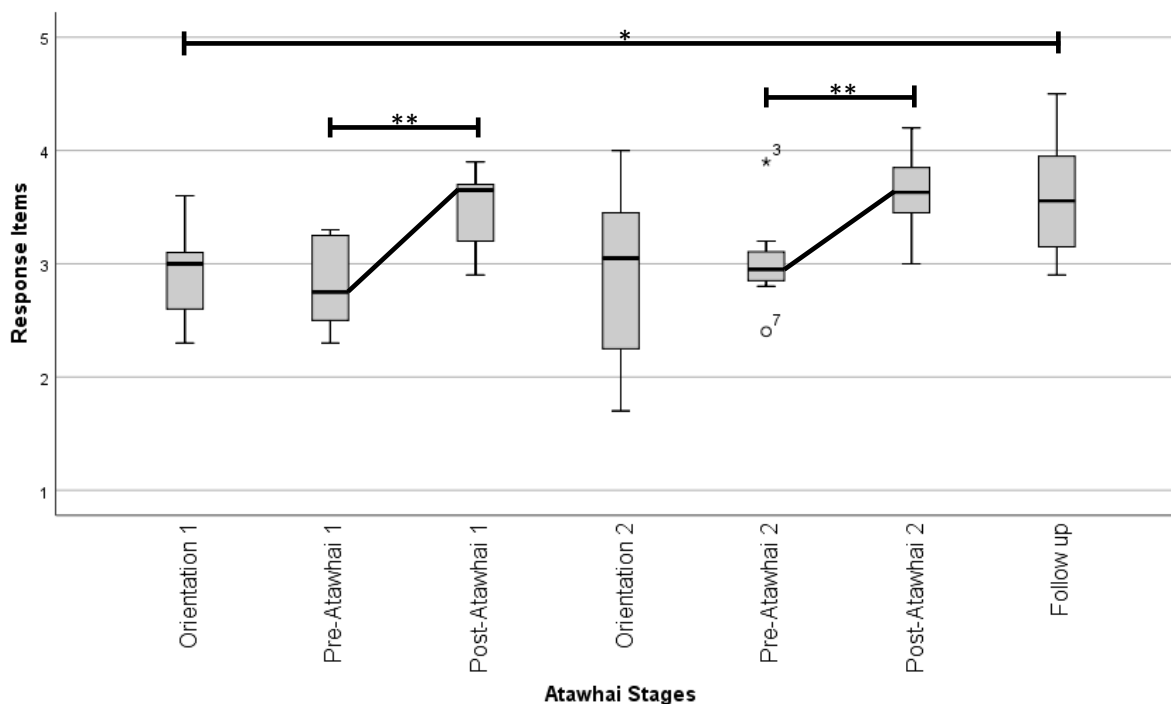
A one-way analysis of variance (ANOVA) with repeated measures was conducted to determine the significance of the change in happiness during the total nine-month period (Orientation 1 to Follow up). The groups means from each of the seven Atawhai stages were compared to determine the overall impact. As this is a comparison test only the results for the eight participants that attended every stage of Atawhai were used. Results indicate that

contact with the Atawhai programme had a significant impact on participants happiness levels, $F(6, 42) = 8.920, p = 0.000$. There is a significant within-subjects linear effect which can be seen by the results trending upwards over the total nine-month period (Orientation 1 to Follow up) , $F(1,7) = 26.832, p = 0.001$.

Paired-sample t-tests were conducted to explore at which stage in particular the significant changes in happiness took place. Happiness levels were compared from the first day (Pre-Atawhai 1) to the last day (Post-Atawhai 1) of the April 2019 intensive, and the first day (Pre-Atawhai 2) to the last day (Post-Atawhai 2) of the October 2019 intensive. Happiness levels were also compared from the first one-day wānanga (Orientation 1) to the last one-day wānanga (Follow up). Results indicate a significant increase in happiness for the eight participants that attended the week-long April 2019 intensive from Pre-Atawhai 1 to Post-Atawhai 1, $t(7) = -3.850, p = 0.006$, with a large effect size $d = 1.36$. Results indicate a significant increase in happiness for the twelve participants that attended the week-long October 2019 intensive from Pre-Atawhai 2 to Post-Atawhai 2, $t(11) = -4.360, p = 0.001$, with a large effect size $d = 1.26$. Results indicate that between Orientation 1 in March 2019 to Follow up in December 2019 there was a significant increase in happiness for the eight participants that participated at every Atawhai stage $t(7) = -2.811, p = 0.026$, with a large effect size $d = 0.99$.

Figure 4

Self-Reported Compassion Levels as a Function of Time at Atawhai



Note. Figure 4 demonstrates a boxplot of overall compassion scores measured over time at Atawhai. The box indicates the means (horizontal lines), 25% and 75% quartiles (box boundaries) and 95% confidence intervals (error bars); * $p < 0.05$, ** $p < 0.01$. The raw data used for the construction of this graph was sourced from White (2020).

Figure 4 represents Atawhai participants self-reported compassion levels recorded at the seven stages during their nine-month participation on the Atawhai programme. It shows an increase in self-regulation over the total nine-month period from Orientation 1 in March 2019 ($M = 2.91$, $SD = 0.41$, $n = 8$) to Follow up in December 2019 ($M = 3.46$, $SD = 0.49$, $n = 12$). It shows an increase in compassion during the two week-long intensives from Pre-Atawhai 1 ($M = 2.83$, $SD = 0.41$, $n = 8$) to Post-Atawhai 1 ($M = 3.49$, $SD = 0.36$, $n = 8$) and Pre-Atawhai 2 ($M = 3.03$, $SD = 0.38$, $n = 12$) to Post-Atawhai 2 ($M = 3.53$, $SD = 0.36$, $n = 12$).

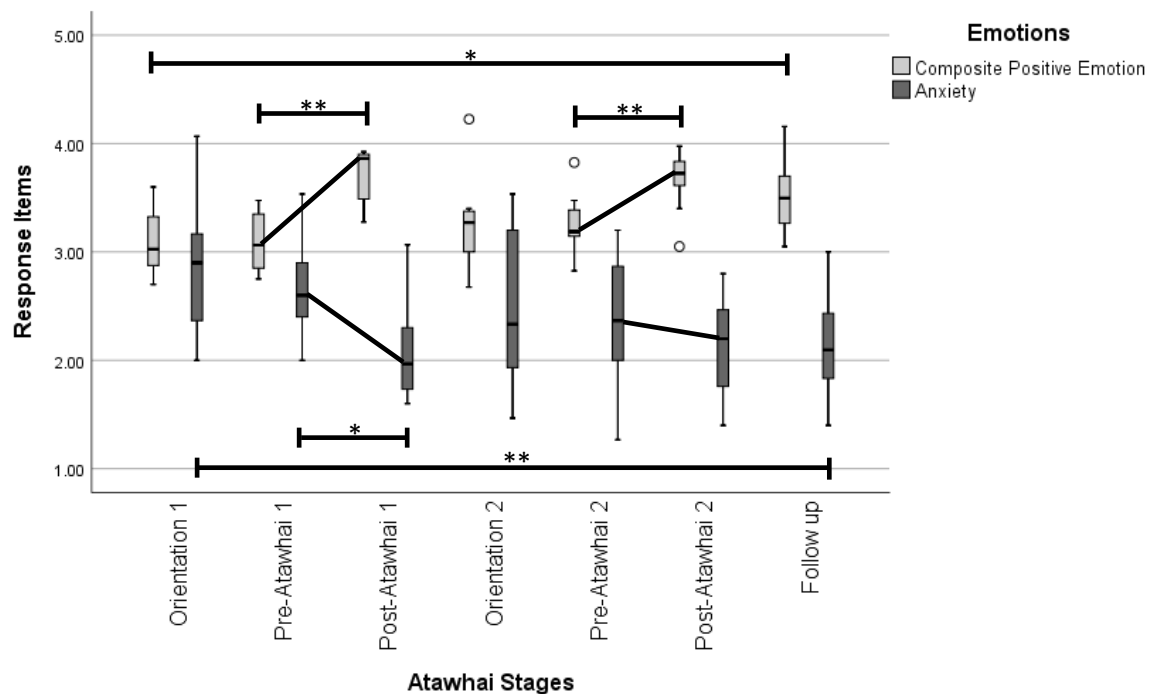
A one-way analysis of variance (ANOVA) with repeated measures was conducted to determine the significance of the change in compassion during the total nine-month period (Orientation 1 to Follow up). The groups means from each of the seven Atawhai stages were compared to determine the overall impact. As this is a comparison test only the results for

the eight participants that attended every stage of Atawhai were used. Results indicate that contact with the Atawhai programme had a significant impact on participants compassion levels, $F(6, 42) = 5.664, p = 0.000$. There is a significant within-subjects linear effect which can be seen by the results trending upwards over the total nine-month period (Orientation 1 to Follow up), $F(1,7) = 11.511, p = 0.012$.

Paired-sample t-tests were conducted to explore at which stage in particular the significant changes in compassion took place. Compassion levels were compared from the first day (Pre-Atawhai 1) to the last day (Post-Atawhai 1) of the April 2019 intensive, and the first day (Pre-Atawhai 2) to the last day (Post-Atawhai 2) of the October 2019 intensive. Compassion levels were also compared from the first one-day wānanga (Orientation 1) to the last one-day wānanga (Follow up). Results indicate a significant increase in compassion for the eight participants that attended the week-long April 2019 intensive from Pre-Atawhai 1 to Post-Atawhai 1, $t(7) = -3.997, p = 0.005$, with a large effect size $d = 1.41$. Results indicate a significant increase in compassion for the twelve participants that attended the week-long October 2019 intensive from Pre-Atawhai 2 to Post-Atawhai 2, $t(11) = -3.397, p = 0.006$, with a large effect size $d = 0.98$. Results indicate that between Orientation 1 in March 2019 to Follow up in December 2019 there was a significant increase in compassion for the eight participants that participated at every Atawhai stage $t(7) = -2.566, p = 0.037$, with a large effect size $d = 0.91$.

Figure 5

Composite Positive Emotions (Mindfulness, Self-Regulation, Happiness and Compassion) and the Negative Emotion (Anxiety) as a Function of Time at Atawhai



Note. Figure 5 demonstrates a boxplot of composite positive emotions (mindfulness, self-regulation, happiness and compassion) and the negative emotion (anxiety) measured over time at Atawhai. The box indicates the means (horizontal lines), 25% and 75% quartiles (box boundaries) and 95% confidence intervals (error bars); * $p < 0.05$, ** $p < 0.01$. The raw data for anxiety, used for the construction of this graph, was sourced from White (2020).

Figure 5 represents the composite scores of Atawhai participants self-reported positive emotion levels (Mindfulness, Self-Regulation, Happiness and Compassion) with self-reported anxiety levels recorded at the seven stages during their nine-month participation on the Atawhai programme. It shows an increase in composite positive emotions over the total nine-month period from Orientation 1 in March 2019 ($M = 3.09$, $SD = 0.33$, $n = 8$) to Follow up in December 2019 ($M = 3.52$, $SD = 0.35$, $n = 12$). It shows an increase in composite positive emotions during the two week-long intensives from Pre-Atawhai 1 ($M = 3.09$, $SD = 0.28$, $n = 8$) to Post-Atawhai 1 ($M = 3.71$, $SD = 0.26$, $n = 8$) and Pre-Atawhai 2 ($M = 3.25$, $SD = 0.25$, $n = 12$) to Post-Atawhai 2 ($M = 3.68$, $SD = 0.25$, $n = 12$).

A one-way analysis of variance (ANOVA) with repeated measures was conducted to determine the significance of the change in composite positive emotions during the total nine-month period (Orientation 1 to Follow up). The groups means from each of the seven Atawhai stages were compared to determine the overall impact. As this is a comparison test only the results for the eight participants that attended every stage of Atawhai were used. Results indicate that contact with the Atawhai programme had a significant impact on participants composite positive emotion levels, $F(6, 42) = 10.594, p = 0.000$. There is a significant within-subjects linear effect which can be seen by the results trending upwards over the total nine-month period (Orientation 1 to Follow up), $F(1,7) = 14.436, p = 0.007$.

Paired-sample t-tests were conducted to explore at which stage in particular the significant changes in positive emotion took place. Positive emotion levels were compared from the first day (Pre-Atawhai 1) to the last day (Post-Atawhai 1) of the April 2019 intensive, and the first day (Pre-Atawhai 2) to the last day (Post-Atawhai 2) of the October 2019 intensive. Positive emotion levels were also compared from the first one-day wānanga (Orientation 1) to the last one-day wānanga (Follow up). Results indicate a significant increase in composite positive emotions for the eight participants that attended the week-long April 2019 intensive from Pre-Atawhai 1 to Post-Atawhai 1, $t(7) = -35.352, p = 0.001$, with a large effect size $d = 1.89$. Results indicate a significant increase in composite positive emotions for the twelve participants that attended the week-long October 2019 intensive from Pre-Atawhai 2 to Post-Atawhai 2, $t(11) = -4.756, p = 0.001$, with a large effect size $d = 1.37$. Results indicate that between Orientation 1 in March 2019 to Follow up in December 2019 there was a significant increase in composite positive emotions for the eight participants that participated at every stage, $t(7) = -3.042, p = 0.019$, with a large effect size $d = 1.07$.

Figure 5 also represents Atawhai participants self-reported anxiety levels recorded at the seven stages during their nine-month participation on the Atawhai programme. It shows a decrease in anxiety over the total nine-month period from Orientation 1 in March 2019 ($M = 2.87, SD = 0.65, n = 8$) to Follow up in December 2019 ($M = 2.15, SD = 0.50, n = 12$). It shows a decrease in anxiety during the two week-long intensives from Pre-Atawhai 1 ($M = 2.67, SD = 0.48, n = 8$) to Post-Atawhai 1 ($M = 2.08, SD = 0.48, n = 8$) and Pre-Atawhai 2 ($M = 2.38, SD = 0.57, n = 12$) to Post-Atawhai 2 ($M = 2.1, SD = 0.50, n = 12$).

A one-way analysis of variance (ANOVA) with repeated measures was conducted to determine the significance of the change in anxiety during the total nine-month period (Orientation 1 to Follow up). The groups means from each of the seven Atawhai stages were compared to determine the overall impact. As this is a comparison test only the results for the eight participants that attended every stage of Atawhai were used. Results indicate that contact with the Atawhai programme had a significant impact on participants anxiety levels, $F(6, 42) = 7.303, p = 0.000$. There is a significant within-subjects linear effect which can be seen by the results trending downwards over the total nine-month period (Orientation 1 to Follow up), $F(1,7) = 39.605, p = 0.000$.

Paired-sample t-tests were conducted to explore at which stage in particular the significant changes in anxiety took place. Anxiety levels were compared from the first day (Pre-Atawhai 1) to the last day (Post-Atawhai 1) of the April 2019 intensive, and the first day (Pre-Atawhai 2) to the last day (Post-Atawhai 2) of the October 2019 intensive. Anxiety levels were also compared from the first one-day wānanga (Orientation 1) to the last one-day wānanga (Follow up). Results indicate a significant decrease in anxiety for the eight participants that attended the week-long April 2019 intensive from Pre-Atawhai 1 to Post-Atawhai 1, $t(7) = 3.389, p = 0.012$, with a large effect size $d = 1.19$. Results indicate a marginally significant decrease in anxiety for the twelve participants that attended the week-long October 2019 intensive from Pre-Atawhai 2 to Post-Atawhai 2, $t(11) = 1.997, p = 0.071$, with a medium effect size $d = 0.57$. Results indicate that between Orientation 1 in March 2019 to Follow up in December 2019 there was a significant decrease in anxiety for the eight participants that participated at every stage $t(7) = 5.625, p = 0.001$, with a large effect size $d = 1.99$.

Z-Scores

The z-score tables (Table 4 and 5) represent individual scores, measured as standard deviations above (positive values in bold) or below (negative values) in relation to the group means for Atawhai participants. Table 4 represents Composite Positive Emotions (Mindfulness, Self-Regulation, Happiness and Compassion) and Table 5 Anxiety. Composite Positive Emotion is also displayed as a line graph in Figure 6 (Appendix N).

Z-score tables are used to determine where an individual's score sits in relation to the group mean. They are used here to explore the group data, represented above in boxplots (Figures 1 to 5) in relation to individuals.

The z-score tables can be interpreted as follows.

The participant's avatar is in the first column. In this research we used native Aotearoa New Zealand bird names as avatars, in order to keep the research anonymous.

The following seven columns identify the Atawhai stages.

The values in the body of the table represent each participant's individual score compared to the group mean for composite positive emotion and Anxiety (Figure 5).

A negative value indicates a score is lower than the group mean. A positive value indicates a score is higher than the group mean. Positive values are highlighted bold.

Table 4

Individual Z-scores for Composite Positive Emotions

Avatar	Orient 1	Pre 1	Post 1	Orient 2	Pre 2	Post 2	Follow Up
Tūī	-.441	.0226	-1.368	-1.381	-1.653	.679	-1.256
Kea	.019	.655	.707	.421	2.269	1.186	1.823
Kākāpō	-1.210	-1.062	-.330	-.324	-.280	.092	1.571
Kiwi	1.556	1.379	.802	.421	.406	.580	.308
Kererū	1.402	1.198	.613	2.474	-.280	.987	.735
Pūkeko	.0192	-.701	.707	-.759	-.0135	.291	-.402
Korimako	-.518	-.248	-1.651	.110	.700	-1.100	-.675
Takahē	-.826	-1.243	.519	-.386	-1.064	-.205	.053
Pīwakawaka				.297	-.321	-.106	-.758
Kākā				.297	.896	.391	-.166
Hoiho				.086	-.182	-.304	.095
Weka				-1.257	-.476	-2.492	-1.327

Note. Table 4 demonstrates a z-score table of individual participants' composite positive emotions (mindfulness, self-regulation, happiness and compassion) measured over time at Atawhai. The participants are represented by their Avatar names and time is represented by the seven stages of Atawhai (Orient 1 to Follow Up).

Table 5*Individual Z-scores for Anxiety*

Avatar	Orient 1	Pre 1	Post 1	Orient 2	Pre 2	Post 2	Follow Up
Tūi	-1.848	-.976	-2.035	-1.158	-1.438	.433	-1.701
Kea	.102	.278	.862	.296	1.963	1.625	1.249
Kākāpō	.718	.139	-.793	.296	.321	-.208	.981
Kiwi	-.205	.139	.172	-.673	-.852	.433	-.494
Kererū	.821	1.394	.586	1.557	.907	1.166	1.518
Pūkeko	-.205	-1.813	-.103	.324	.338	-.820	.310
Korimako	-.718	.836	.310	.975	.438	-.514	-.628
Takahē	1.334	.003	1.000	.975	1.025	1.319	.190
Pīwakawaka				.781	-.852	-1.584	-1.567
Kākā				-.867	-.265	-.820	.190
Hoiho				-1.449	-.734	-.820	.042
Weka				-1.061	-.852	-.208	-.091

Note. Table 5 demonstrates a z-score table of individual participants anxiety measured over time at Atawhai. The participants are represented by Avatar names and time is represented by the seven stages of Atawhai (Orient 1 to Follow Up). A positive score indicates a decrease in anxiety and a negative score indicates an increase in anxiety.

The following tables (Tables 6 to 10) explore connections between the z-scores from Tables 4 and 5 and the daily debrief and deep debrief questionnaires completed by rangatahi during the October 2019 week-long intensive.

Kākāpō (Table 6) began Orientation 1 with a z-score of -1.210 for composite positive emotions and finished at Follow up with 1.571. At every stage of Atawhai the composite positive emotion z-score increased for Kākāpō. For anxiety this rangatahi's score at Orientation 1 was 0.718 and 0.981 at Follow up. An increasing positive score represents a decrease in anxiety. These z-scores indicate an increase in positive emotion and a decrease in anxiety over the duration of Atawhai 2019 for Kākāpō relative to the group means. The following are comments made by this rangatahi and their mentor during the October 2019 week-long intensive.

Table 6*Daily debrief data from rangatahi Kākāpo and mentor*

Day	Kākāpo	Mentor
1	<i>"I used trust [mindfulness pillar] when my mentor and I went for walk and had a kōrero, I don't talk..... Doing the mindfulness helped me open up to my mentor and tell him things I wouldn't tell anyone.....I'm proud that I talked with my mentor when we went for a walk"</i>	<i>"Kākāpo opened up more as our conversation flowed especially when we went for a walk. Mindfulness and yoga made him relaxed and happy"</i>
2	<i>"Using the yoga today was helpful because it gave me energy for the day"</i>	<i>"Today Kākāpo came in tired, he only had 3 hours sleep. Yoga energised him."</i>
3	<i>"I used the pillar trust [mindfulness pillar] when I trusted my mentor with my history/origin story..... Mindfulness helped me question my thoughts"</i>	<i>"Kākāpo was great today. He had a lot of sleep he said. Again yoga gave him energy for the day. He enjoyed the work [of Byron Katie]Today he trusted in me, telling me stories about his life."</i>
4	<i>"The yoga was help[ful] because it calmed me down and gave me a lot of energy to last the day.....Today I am proud of joining the two dances for the talent show. I am proud I did the yoga and meditation because it helped me be brave"</i>	<i>"Wow. Real impressed with how far he has come in a small amount of time..... What did he learn, he's safe to be himself..... So proud of Kākāpo."</i>

5	<p><i>"I feel more like myself, more open with everyone and happy with life.....questioning my thoughts and The Work of Byron Katie helps with my emotions"</i></p> <p><i>"The main thing I have learnt [this week] was that I control my own thoughts and my thoughts can be questioned"</i></p> <p><i>"This programme could be better if we had a little more time focusing on our strengths"</i></p>	<p><i>"Kākāpo learnt (within the supporting environment of The Kindness Institute) it's okay to be himself and people really enjoy him for who he is. He has confidence underneath.....and is an amazing human being."</i></p>
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Not all participants embraced all the mindfulness components of Atawhai. According to her mentor Kea (Table 7) found mindfulness and yoga hard. Her self-reports indicate though that breathing and manifestations were beneficial. Kea began Orientation 1 with a z-score of 0.019 for composite positive emotion and finished at Follow up with 1.823. She began Orientation 1 with a z-score of 0.102 for anxiety and finished with a score of 1.249. These z-scores indicate an increase in positive emotion and a decrease in anxiety over the duration of Atawhai for this participant in relation to the group means. Kea and her mentor made the following comments during the October 2019 week-long intensive.

Table 7*Daily debrief data from rangatahi Kea and mentor*

Day	Kea	Mentor
1	<i>“The breathing exercises help a lot during and after exercise and dance”</i>	
2		<i>“Kea doesn’t engage in mindfulness and yoga because she’s tired”</i>
3		<i>“I don’t think she gets the meditation. She says she’s bored. I try to link it in with our poetry sessions. Doing yoga and mindfulness prepares you for the page ………”</i>
4		<i>“We talked about the block she has with mindfulness and yoga.”</i>
5	<i>“I feel really accomplished in my emotional and mental state……..I used mostly breathing and manifestation at home and in stressful situations as it lessened this and made me look forward to the future”</i>	<i>“Benefits for Kea is that it has given her time to reflect and space to be able to think mindfully about where she is, where she’s come from and where she is heading.”</i>

The previous two case studies documented Atawhai experiences for rangatahi that have been engaged with Atawhai for over 12 months. Kaka (Table 8) joined Atawhai in September 2019 (Orientation 2). Her z-score for anxiety at this stage was -0.867 and at follow up 0.190. Her z-score for composite positive emotion at commencement was 0.297 and at follow up -0.166. Kaka and her mentor’s comments below indicate she embraced the mindfulness-based skills from day 1 and uses them in various ways.

Table 8*Daily debrief data from rangatahi Kaka and mentor*

Day	Kaka	Mentor
1	<i>"Being mindful of my 5 senses was the most helpful for me and I learnt to get in touch with all my senses"</i>	<i>"She's really into meditation and yoga. Not seen a rangatahi that excited before."</i>
2	<i>"I learnt to question all my thoughts because not all are true" "I would like to challenge myself by staying more present and focused for the day, not just when we meditate"</i>	<i>"Her goal is to let go of the past. Our poem is about that."</i>
3	<i>"The pillar [of mindfulness] I felt most connected to was trust. I trusted my mentor when reading my poem to him. I'm proud of opening up and reading my poem..... the tools that were most helpful was turning our thoughts into a character and then replacing that thought with something positive"</i>	<i>"She used breathing before she did her poem."</i>
4	<i>"The work of Byron Katie was useful when I had to remind myself that not all thoughts are true"</i>	<i>"We have created a space here where everyone is even more open than usual. Safe space.....She loves doing mindfulness with everyone."</i>
5	<i>"The main thing I've learnt is to just take a second to breathe rather than</i>	

*rushing through life and being
unaware”*

Hoiho (Table 9) was another rangatahi that started in September 2019 (Orientation 2). She had the highest score z-score of all the rangatahi for anxiety of -1.449 on this day. Her comment at the end of this day, as per Table 9 below, was that she found yoga calming. Hoiho’s z-score for anxiety at Follow Up was to 0.42. Hoiho’s mentor talked about helping her with strategies to incorporate yoga into her everyday life. Hoiho’s composite positive emotion was 0.086 at commencement and 0.095 at Follow Up.

Table 9*Daily debrief data from rangatahi Hoiho and mentor*

Day	Hoiho	Mentor
1	<i>"I learnt to be calm in yoga"</i>	<i>"Hoiho felt energised after mindfulness"</i>
2	<i>"[The taha of Te Whare Tapa Whā I feel most connected to today is] whānau because the amount of fun I had dancing"</i>	<i>"The more the girls were dancing the more other people were joining in." "They are both starting to like yoga more. It's calming for them. We talked about how they can use it in their everyday life. They didn't know how. We talked about using it to calm themselves."</i>
3	<i>[What are you proud of for having done today]"knowing that there's people that I can talk to about things"</i>	
4		<i>"Hoiho.....just needs love and support."</i>
5	<i>"Loving kindness meditation and self-love was the most helpful [skill] for me".</i>	<i>"we have talked about how it is important for Hoiho to put herself first and make sure her safety and emotional state is her first priority."</i>

Takahe (Table 10) has been on Atawhai since April 2019. Her composite positive emotion was negative compared to the group means for five of the seven Atawhai stages. At Orientation 1 it was -0.826 and at Follow Up 0.053. Her anxiety was the lowest of the group in April 2019 at 1.334. Over the seven stages of Atawhai her anxiety z-score was positive at every stage indicating low anxiety in relation to the group means. These are her and her mentor's comments.

Table 10*Daily debrief data from rangatahi Takahe and mentor*

Day	Takahe	Mentor
1	<i>"Yoga [was the most useful tool] because it woke me up when I was tired"</i>	<i>"Takahe is so held back if she can't do things perfectly right..... Working on letting things go [mindfulness pillar]"</i>
2	<i>"I would like to challenge myself [tomorrow] by not falling asleep"</i>	<i>"She hated the mindfulness walk. She didn't want to do anything with me. I will get her to do something completely different tomorrow."</i> (Another mentor added that Takahe had not slept last night. She had to babysit siblings while her parents worked nightshift)
3	<i>"Learning the 5 rites [was the most useful tool]"</i>	<i>"Takahe was more positive. She enjoyed the 5 rites, teaching me"</i>
4	<i>"When doing art I was patient [mindfulness pillar]"</i>	<i>"She learned if things don't go to plan, if you give yourself a second, and reapproach your task, it might turn out better."</i>
5	<i>"[I have learnt] to be more mindful, [and] that I can teach yoga/meditation"</i>	<i>"Takahe has developed confidence. She was able to lead us through the Hikitia te hā [breathing exercise] She is eager to share the Hikitia te hā with her whānau"</i>

Researchers Observations - Specific Components of Atawhai

The following sections introduce elements of Atawhai that the researcher believes are important in context of the overall programme.

Games

Games were a frequent feature at Atawhai. Every morning started with up to an hour of games. Everyone that was present at Atawhai was invited to join the morning games; staff, mentors, rangatahi, any volunteers present, and the researcher. If there was a break during the day often an impromptu game would erupt instigated by rangatahi.

Some of the games at Atawhai had a cultural element such as Pūkana (to stare wildly, dilate the eyes). Pūkana is game where participants form a circle and interact using words and hand actions. This game became very loud at times as it contains an element of challenging another participant. This quote captures its fun side, and its element of challenge.

“I felt most connected to taha whānau (social) because when playing games there’s different energy and when playing you get all serious and have a laugh” (Takahē, day 1)

Nature

At Atawhai connection with nature is encouraged and explored. Rangatahi recognised favourable elements of nature through their senses.

“Using our sense of smell of the environment” “Taking Rosemary off trees and smelling it” (Kōtare, day 1)

“Smelling flowers on a walk, remembering smells from childhood” (Kōtare, day 2)

Rangatahi also reacted to pollution.

“I felt connected to my taha wairua because my wairua was put off by pollution.....I used the acceptance pillar [mindfulness pillar] by accepting my feelings on pollution”

(Kererū, day 2)

They talked about ways they could contribute to a better environment.

"I am proud I picked up rubbish and naming it TAUTOKS! Campaign" (Kererū, day 2)

The Performance

A highlight of the Atawhai week-long intensives is The Performance Event. This takes place on the Saturday evening after a week at Atawhai. Rangatahi and their mentors spend some time every day during the Atawhai week preparing for this night. They have one-to-one mentoring time to prepare. All rangatahi are required to present on at least one of the skills they have been taught during the week such as yoga, meditation, the work of Byron Katie. It was decided the overarching theme for the October 2019 performance was Te Whare Tapa Whā as this is a foundation element of the Atawhai programme.

On the Saturday rangatahi, mentors, volunteers and The Kindness Institute staff met around 3pm. Prior to the performance yoga and meditation was practiced as a group to prepare the rangatahi for the evening ahead. Following this the hall was set up and rangatahi practiced their pieces. Volunteers were busy behind the scenes setting up lighting and sound, preparing food, setting up a merchandise stand, making sandwiches for the rangatahi and many other jobs.

Prior to guests arriving a loud and boisterous game of Pūkana broke out by mentors, rangatahi and the team. As families arrived they were welcomed into the Pūkana circle. There was much noise and laughter as families were given hasty instruction on the key words and movements to enable them to participate. This was occurring as the game was in progress. The Pūkana circle grew and grew as families arrived and joined in.

The hall had been set up for seating for about eighty guests. After the Pūkana game guests were seated and the performance began. Almost immediately guests were invited to stand and move all the chairs to the side of the room to make way for yoga mats. The audience set up a mat each and engaged in learning a number of yoga poses, Māori tai chi (mau rākau) and breathing and mindfulness practices. The performance included a number of dance items by the 'Spice Genders' and some powerful poetry recitals. All the items were put on by rangatahi. Their mentors were at the front of the crowd giving them encouragement. The guests were treated to a fabulous performance and a meal afterwards with their rangatahi.

Empowerment

This section addresses research question three: Are rangatahi empowered to share the skills they learn within their homes, whānau and communities to enable a wider benefit from the mindfulness-based skills?

Rangatahi were empowered to become teachers at Atawhai. They shared the following stories through the debriefs about teaching at Atawhai, in their homes, and in the community.

Rangatahi taught at Atawhai on a daily basis from day one:

“I am proud of teaching the five rites [an ancient yoga practice]” (Korimako, day 3)

The deep debrief questionnaire on day five (Appendix F) asked two questions in relation to using the mindfulness-based skills outside Atawhai. Question three was; What’s an example of when you’ve used the tools this week at home/outside of Atawhai? Question five was; Have you shared any of these skills with your whānau/friends? These are the responses from rangatahi:

“I was trying to explain the 3 types of business to my Mum so that she would understand why she gets upset” (Kākāpō, day 5)

“Every day after Atawhai I tell my Dad everything we’ve learnt that day. Also talking to my friends about belly breathing” (Kākā, day 5)

“I used the 5 senses with my siblings outside when we were walking and it was good for them” (Weka, day 5)

“I used yoga at home with my family and I felt relax[ed] and calm” (Pīwakakwaka, day 5)

“I used the work on one of my friends who was stressed about a pregnancy” (Kea, day 5)

One rangatahi received the Humanitarian award at their High School for teaching the mindfulness-based skills to hundreds of students. Rangatahi shared the mindfulness-based skills in their communities.

“Yes, I shared it with my class and they thought it was a good experience” (Pūkeko, day 5)

“I taught refugees” (Takahē, day 5)

“I have shared the sun salutations with my school” (Kererū, day 5)

December 2019 Wānanga

In December 2019 The Kindness Institute hosted a wānanga to thank the 2019 Atawhai volunteers for their contribution throughout 2019. This was another opportunity for rangatahi to teach mindfulness, meditation and yoga.

During the group’s gratitude circle a Kindness Institute staff member asked rangatahi the following questions in relation to learning and practicing the mindfulness-based skills

1. Who reacts differently now in certain situations? Most hands went up.
2. Who wants to help their family? All hands went up.
3. Who can think of a good way without imposing to teach people the skills? Rangatahi answered with – “Work on yourself, model it, they might come to you.”

During the gratitude circle rangatahi were asked who had practiced and taught the mindfulness-based skills in the last month. All the rangatahi’s hands went up. Some rangatahi shared their teaching practice. These are their comments.

“We taught our class all the mindfulness-based skills including the gratitude circle, 5 rights and sun salutations. The class didn't listen at first. They listened when we taught shavasana [corpse pose in yoga, often used for relaxation at the end of a session]. They were happy. We taught for 2 hours. It took up an hour of class time and our whole lunchtime.” (Korimako, Pūkeko and Pīwakawaka)

“I do meditation when I get up. I do yoga after that sometimes.” (Kākāpō)

*“I taught the work to my Mum. She lives with a disease. I know she uses it. I hear her using it.
I taught her because I thought it would help her.” (Tūī)*

*“I teach the business to anyone that sits next to me if they complain about something. I
taught my two friends. Now if I am teaching someone new they cut me off and start
explaining it.” (Kiwi)*

*“I have mainly taught breathing to the performance arts people I know. I am in a couple of
different groups. The mindfulness-based skills help us focus and not forget things when we
are performing.” (Kea)*

Atawhai Expected Outcomes

Through the narratives above we can see examples where the Atawhai expected outcomes (Appendix A) have been met. Some examples are listed in Table 11.

Table 11

Examples of Atawhai expected outcomes (Appendix A) being met at the October 2019 week-long intensive

Expected Outcome (Improvements in)	Example of an improvement in the expected outcome variable
Emotion regulation	Hoiho – learnt to be calm in yoga Takahē – when doing art I was patient
Relationships	Kākāpō – used trust and opened up to my mentor Kākā – connected through whakawhanaungatanga (process of establishing relationships, relating well to others)
Participation	Kākāpō – joined two dances for the talent show
Possibilities	Kea - mindfulness skills help with stress and allow me to look forward to the future
Cultural connection	Kererū – Māori was intertwined with Atawhai Hoihi – connected with Māori tai chi
Sense of belonging	Kākā – connected to ancestors through mau rākau

Chapter Five: Discussion

“Kid, you’ll move mountains.”

Dr. Seuss – Oh, The Places You’ll Go! (1990)

Chapter Overview

The aim of the present study was to conduct an evaluation of The Kindness Institute’s Atawhai 2019 Programme. This discussion section focuses on the three research questions, which were; Did rangatahi learn skills at Atawhai 2019 that will help them positively deal with challenges?, What effect does the Atawhai programme have on rangatahis’ positive and negative emotions?, Are rangatahi empowered to share the skills they learn within their homes, whānau and communities to enable a wider benefit from the mindfulness-based skills?

The findings identified two key areas that rangatahi recorded as being of great importance to them. These were culture and support. The author would like to add a third key area, interactive games. Whilst games weren’t mentioned in the debriefs the author witnessed herself the powerful impact that games have on inclusion, connection and boosting mood.

The findings also identified three key areas regarding the mindfulness-based skills. These were; they were beneficial for rangatahi in a number of ways; rangatahi were clear about their preference for a particular skill or skills, and mentors were encouraging in helping rangatahi incorporate the skills into their daily lives both inside and outside Atawhai.

Results from analysis of the quantitative data on the variables mindfulness, self-regulation, happiness, compassion and anxiety clearly showed a significant increase in positive emotion and a significant decrease in negative emotion for rangatahi. This occurred despite stressful circumstances and environmental influences rangatahi reported as affecting their daily lives.

Self-report measures, either through the completion of debriefs or through group conversation, confirmed that all rangatahi are using mindfulness-based skills themselves outside Atawhai to varying degrees. Also all rangatahi have engaged in teaching the

mindfulness-based skills outside Atawhai to their families, and in a number of instances their schools and other places they frequent in their communities.

This research also shows that the positive results for the two week-long intensives represent gains which account for more than just the sum of their parts. They represent the fact that the impact of the second week-long intensive built on the work of the first for all measures (mindfulness, self-regulation, happiness, compassion and anxiety). This confirms that the benefits of this programme increase over time and provides a strong case for the benefits of participants attending repeated intensives.

The following sections discuss the findings of the three research questions further and include recommendations.

Did Rangatahi Learn Skills at Atawhai 2019 that will help them Positively deal with Challenges?

In order to answer this question we first need to discuss culture and support which were key areas rangatahi identified as positive for them.

Culture

Rangatahi talked about connecting to their Māori culture and in one instance their ancestors. Cultural identity and ethnic engagement is critical to the wellbeing of ethnic groups (Ball, 2010; Durie, 2001; Mark & Lyons, 2010; King et al., 2018; Ministry of Pacific Peoples, 2018; Pihama et al., 2018; Williams et al., 2018). Rangatahi regularly expressed their connection with culture through the use of te reo (the Māori language) and other cultural practices. One rangatahi summed up Atawhai's inclusion of Māori culture as "I do feel most connected to my culture because Māori has been intertwined with Atawhai". The freedom to engage in your own culture and have your culture recognised and promoted is crucial to mental wellbeing (Durie, 2001). Cultural identity is a protective factor for Māori (Aho & Liu, 2010, Durie 2001, Pihama et al., 2018).

Knowledge of your culture strengthens your sense of self and provides coping mechanisms that support wellbeing (Pihama et al., 2018). Rangatahi were enthusiastic in engaging in specific cultural practices such as mau rākau, or Māori tai chi as some rangatahi called it. Some of the rangatahi had never heard of mau rākau (traditional Māori martial art) before and were excited to learn a new cultural skill.

Rangatahi were comfortable using the Te Whare Tapa Whā model daily to gauge the balance in their four walls of holistic health. Although Te Whare Tapa Whā was developed nearly forty years ago its concepts are still relevant today. Mason Durie (1999) subsequently developed the Te Pae Māhutonga model but Te Whare Tapa Whā is still widely used and promoted (Ministry of Health, 2017; The Education Review Office, 2016, p. 26). Its simple concepts allowed rangatahi a model they could easily relate to, and work with.

Support

The word used to describe support at Atawhai was Tautoko. Rangatahi referred to support in a number of ways. They talked about Atawhai in a physical sense as a supportive place to be, and they talked about support in an emotional context of knowing there was support available. These types of support created an environment which rangatahi said allowed them to feel more like themselves. Mentors said rangatahi learned it's okay to be themselves and they learned people really enjoy them for who they are.

Rangatahi talked about Atawhai as whānau. They talked about whakawhanaungatanga, the process of getting to know each other. They talked about the whole whare (house) being connected, being together, interaction, and making friends. One rangatahi said on day four "I feel like we have a whānau now". Working together as a collective is important for both Māori (Ball, 2010) and Pacific peoples (Ministry of Pacific Peoples, 2018).

The Atawhai mentoring model operates on a system of shared responsibility whereby all mentors take an active interest in the development and wellbeing of all the rangatahi. Mentors acted as guides for rangatahi but they also adopted the principle of ako, meaning to learn and teach. This was evident when mentors engaged in active listening with the rangatahi and empowered them to make decisions throughout the programme. Mentors themselves were actively supported by The Kindness Institute staff and each other throughout the day in the debriefs and general conversations. In particular the Atawhai Alumni mentors were supported and they were always encouraged to speak at the mentor debriefs. Alumni mentors comfortably filled the role of tuakana, in a tuakana-teina relationship with the rangatahi they mentored. This was possible due to their familiarity with the Atawhai programme from their previous attendance as an Atawhai rangatahi.

The rangatahi were quick to trust and confide in their mentors. From day one they were using trust. Rangatahi that said they don't talk were telling their mentors things they said they wouldn't tell anyone. Through shared values and purposes, evident in a kaupapa whānau group, mentors provided a network of support for rangatahi (Pihama, 2018).

Games

It was evident to the author that interactive games were a crucial part of Atawhai. The rangatahi were always having fun playing games. Games like Pūkana were opportunities for rangatahi to connect to their culture.

Games appeal to young people. Youth know better than adults how to play and have fun through games. At Atawhai even the shyest of youth were coaxed into the fun element of a game. Games are also empowering for youth as this is their domain. Rangatahi would take the lead in choosing the game, inviting everyone in, and explaining the rules if needed. Whilst games may be thought of as add-ons or fill-ins for programmes they play an important role in socialisation for youth. Historically for Māori games were used to train children for future roles in adulthood (Jenkins et al., 2011).

The Mindfulness-Based Skills

The common themes in regard to the mindfulness-based skills were that; a) rangatahi found them beneficial, b) they spoke of preferences for a particular skill or skills, c) mentors encouraged rangatahi to use the skills both inside and outside Atawhai. In regard to point b) different rangatahi had preferences for different skills, or sets of skills, and the preferences for the same rangatahi could change from day to day. These concepts are discussed further below.

Beneficial. A common theme was that yoga, mindfulness and meditation were beneficial. They helped rangatahi let go of the past, be brave to face challenges, deal with pressure, anger, and challenging people.

Preference. Rangatahi learned a variety of skills at Atawhai 2019. Within the broad terms of mindfulness, meditation and yoga there were dozens of individual practices rangatahi were taught. For example within meditation there were loving-kindness

meditations, forgiveness meditations and many others. The practices taught at Atawhai identify many, if not all, of positive psychologies 24 character strengths such as gratitude, forgiveness, bravery, creativity, self-regulation, leadership and kindness.

Rangatahi often preferred one or two skills more than others. Enjoyment or ease of practice were the main reasons rangatahi preferred a particular method. One example of preference was “mindfulness is easy but I feel more connected to yoga.”

The preferences could change from day to day for the same rangatahi. This was likely due to the combination of new skills being introduced and also the familiarisation and mastery of skills over time.

Different rangatahi preferred different skills. One rangatahi said loving-kindness meditation and self-love were the most helpful. Another said ‘The Three Types of Business’ helped a lot with pressure. Another said Forgiveness meditation was the most helpful because “I know now that forgiveness is my choice and not anyone else’s.” Active listening was also mentioned as very helpful. Rangatahi said mindfulness and The Work of Byron Katie helped them question their thoughts and through this practice they came to understand what thoughts are and that not all thoughts are true.

The skills had differing effects on rangatahi. Rangatahi used words like yoga woke me up, gave me energy for the day, calmed me down. They said breathing techniques helped after exercise and dance, with anger, and kept them relaxed and calm.

Some rangatahi struggled to master some of the skills. Mentors made comments like, “she doesn’t engage in yoga and mindfulness because she’s tired” and “she says she’s bored during meditation.” In these instances rangatahi mentioned other skills that they could work with and found beneficial.

Mentor Encouragement to use Them. Mentors spent time encouraging rangatahi to use the skills inside and outside of Atawhai. In the mentor only time mentors talked to rangatahi about their own mindfulness practices. They kept conversations honest by admitting that adults find mindfulness hard at times too. Mentors tried to link mindfulness skills with other enjoyable activities for rangatahi such as saying, “doing yoga and mindfulness prepares you for the poetry page.” Mentors helped rangatahi find ways to incorporate the mindfulness-based skills into their daily routines by telling them they “can use yoga in everyday life to calm themselves.”

Recommendations

1. Continue with the variety of mindfulness-based skills currently offered at Atawhai. Variety gives rangatahi choice, allows them to discover preferences for the skills that work best for them, and recognises preferences can change over time.
2. Continue with mentors encouraging the use of the mindfulness-based skills outside Atawhai. Rangatahi looked up to their mentors, they trusted them from day one, and with encouragement are more likely to adopt a regular mindfulness-based practice.

What Effect does the Atawhai Programme have on Youths' Positive and Negative Emotions?

The quantitative results indicated that engagement at Atawhai 2019 significantly increased rangatahis' composite positive emotion and significantly decreased their negative emotion (Figure 5).

Significant increases were found at various stages of the Atawhai programme for the individual components of composite positive emotion; mindfulness (Figure 1), self-regulation (Figure 2), happiness (Figure 3) and compassion (Figure 4). A similar result was recorded for negative emotion (Figure 5) with significant decreases in anxiety at various stages of the Atawhai programme. For all five variables the most prominent increases (or decreases in the case of anxiety) were noted during attendance at both the April 2019 and October 2019 week-long intensives. It was during these weeks that rangatahi experienced the most intensive exposure to mindfulness-based skills, immersion in Māori culture, mentoring, and the creative arts.

The author suggests that as the positive effects correspond with physical time at Atawhai the gains are a result of the combination of wrap-around support and teachings offered particularly at the April 2019 and October 2019 intensives. This confirms that the benefits of Atawhai increase over time and it provides a strong case to promote participants attending repeated intensives. The repeated exposure leads to better outcomes for participants. As has been found in previous evidence-based interventions, benefits of mindfulness programmes can accumulate over time leading to greater gains from the practice (Klingbeil et al., 2017).

As identified in the findings above, from research question 1, the wrap-around support and teachings consisted of culture, support, interactive games and mindfulness-based skills. Culture, support and interactive games have been addressed above. Below we will address mindfulness-based skills. We will also discuss character strengths which were evident at Atawhai 2019 and are known to contribute to positive emotion.

Mindfulness-Based Skills

Intentional Thinking. Present-moment thinking was promoted at Atawhai 2019 through learning mindfulness-based skills. Rangatahi said they learned they control their own thoughts, thoughts can be questioned, and they felt this process helped with their emotions. Our findings concur with previous research that found mindfulness-based interventions increase mindfulness, emotion and behaviour regulation and subjective wellbeing (Klingbeil et al., 2017) and decrease anxiety (Kallapiran et al. 2015; Zenner et al. 2014).

Research tells us intentional changes in thinking can lead to changes in emotion (Fredrickson, 2004). Positive emotion can be built through greater awareness and the thought-action process (Fredrickson, 2004). Negative emotions which are connected to internal and external stressors (Diener et al., 2017) can diminish through building positive emotion (Fredrickson, 2004).

Noticing emotions. Intentional thinking leads to noticing emotions. Through noticing emotions and not reacting to them emotional regulation is built (Bishop et al., 2004). Previous research tells us that mindfulness provides a mechanism for emotional balance (Arden, 2010; Broderick et al., 2012; Joseph, 2015; Metz et al., 2013; Meiklejohn et al., 2012; Oberle & Schonert-Reichl, 2014). This increase in self-control equates to increased subjective wellbeing (Wiese et al., 2018).

Character Strengths

Research by Quinlan (2017) found youth who are aware of their strengths are more likely to flourish. Hone et al., (2015) found workers who knew their strengths were nine times more likely to be in the top wellbeing group and those that knew and used them were

18 times more likely to be in the top wellbeing group. Using character strengths was a daily occurrence at Atawhai. Some examples are included below.

Practicing Positive Actions. Character strengths such as gratitude, honesty, kindness and love were used during the daily gratitude circles, loving-kindness meditations, forgiveness meditations and other practices at Atawhai 2019. The Atawhai culture promoted positive actions. Research has found happiness can be increased by practising gratitude, optimism and prosocial actions (Myers & Diener, 2018).

Social Relationships. Atawhai promoted connection and engagement and positive relationships for rangatahi between themselves and other rangatahi, mentors, their whānau, and communities. Research tells us that positive emotions are impacted by social relationships. Positive social relationships can lead to an increase in happiness (Diener et al., 2017). Some examples of the character strengths used during social engagement were creativity with mentors, bravery teaching the mindfulness-based skills, appreciation of beauty in nature, and leadership and teamwork when working towards presenting at the Performance Event.

Recommendations

3. Continue the process of rangatahi attending more than one week-long intensive. It is clear the benefits accumulate over time resulting in greater overall gains.
4. Many of the mindfulness-based practices taught at Atawhai are grounded in positive psychologies 24 character strengths. It could be beneficial for rangatahi to identify their individual signature strengths. Previous research reports that children that know, and use, their signature strengths are more likely to flourish.

Are Youth Empowered to Share the Skills they Learn in their Homes and Communities to Enable a Wider Benefit from the Mindfulness-Based Skills?

The Atawhai mission statement is “TKI exists to empower marginalised rangatahi in Aotearoa to transform their mental health and wellbeing, and that of those around them” (K Cavit, personal email 2/10/2019).

Matton (2008) reports empowering community settings exhibit three external impacts, empowered individuals, empowered members radiating their influence and external organisational activities. At the December 2019 wānanga youth were asked “who can think of a good way, without imposing, to teach people the skills.” Replies were “work on yourself, model it, and they might come to you”. Results from the debriefs and group sharing practices identify that youth are using these three strategies to share the skills. On the final day of Atawhai a rangatahi said “I have learnt that I can teach yoga and meditation.”

We will look further at Matton’s (2008) three specifics below, accompanied by rangatahi’s answers confirming they are using the mindfulness-based skills.

Empowered Individuals – “Work on Yourself”

Youth are empowered through participation, learning new skills and shared decision making (Matton, 2008). Rangatahi are empowered on all these levels at Atawhai.

Rangatahi confirmed they are working on themselves using the breathing, meditation, mindfulness and yoga skills they learned at Atawhai. They are continuing with these practices as they report that they help them with stressful situations and feelings of anger, frustration, anxiety and nervousness. Rangatahi said practicing mindfulness helps them feel relaxed, calm, energised, present and aware. They said it helps them look forward to the future.

Empowered Members Radiating Their Influence – “Model It”

Youth have a need for mattering in their communities and an interest in contributing to them (Oberle & Schonert-Reichl, 2014). From day 1 at the Atawhai October 2019 week-long intensive rangatahi were empowered and encouraged to teach the skills they were learning within Atawhai and at home. Encouragement was given at Atawhai by other rangatahi, mentors, TKI staff and volunteers to achieve this.

At the performance event on the last night of the October 2019 week-long intensive every rangatahi taught at least one of the mindfulness-based skills to the audience of about 80 people which were from their whānau and communities.

Rangatahi also taught the community of Atawhai volunteers at the December 2019 wānanga.

One of the Atawhai Alumni has taught all her friends the mindfulness-based skills. Her friends are now teaching others.

Through awareness rangatahi have begun to model the skills in a number of situations. They talk about using stress breath when being annoyed by others and thereby limiting a potential negative reaction towards others. They talked about using Byron Katie's three types of business to not let other peoples' comments affect them, also limiting a potential negative reaction towards others.

Rangatahi talked about teaching their parents, siblings, and friends.

One rangatahi found attempting to teach friends caused the friends to laugh. While at the time this was hurtful it was an opportunity for reflection and a different approach.

External Organisational Activities – “They Might come to You”

The Kindness Institute has formed partnerships with schools in the Auckland region. This two-way process sees The Kindness Institute recruiting Atawhai participants from the schools and the schools promoting and utilising Atawhai Alumni as wellbeing teachers within the school.

Rangatahi have shared the meditation with their own classes and/or taught to other classes. One rangatahi has taught refugees and another rangatahi has taught fellow performance arts people. Feedback they received was that it was a good experience and helped with focus.

The collective action of empowered individuals contributes to community betterment and social change (Matton, 2008).

Conclusion

Atawhai is a positive institution that changes rangatahi's lives through a combination of mindfulness-based skills, culture, mentoring and the creative arts. The teachers, including mentors, are equipped with wellbeing skills themselves, a key attribute of a positive institution (White & Murray, 2015). The Atawhai kaupapa (purpose) of embracing and promoting culture and wrapping the rangatahi with love, support and kindness assists their goals. The programme covers key areas found to be necessary for effective wellbeing programmes such as being interactive, long-term, having consistent caring staff, and involving youth in decisions (Ball, 2010). Atawhai gives rangatahi the skills to enhance their

own lives and strengthen their community. It gives rangatahi confidence and empowers them to become teachers in their communities.

Limitations

The first limitation is this study's overall sample size was small.

Another limitation is that some data was collected via self-report measures. These may be affected by social desirability bias (Dahlberg & McCaig, 2016) where respondents answer questions in a manner they feel will be pleasing to their audience. This could apply in particular to youth participants seeking validation from adults. To mediate this somewhat the use of two forms of questionnaires rather than face-to-face interviews or focus groups was intended to remove the tendency for people in social situations to reply more positively in order to please the researcher (Dahlberg & McCaig, 2016). The downside is that in paper-based questionnaires participants may feel less obliged to give a carefully considered answer (Dahlberg & McCaig, 2016).

Future Research Suggestions

Future research using the same measures on this cohort would be interesting to determine if gains continue to increase over time.

This research did not look at the role, or impact, that character strengths have on rangatahi. Future studies focusing on marginalised youths' awareness and use of their own signature strengths may provide interesting findings to add to current research on this topic in Aotearoa New Zealand.

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Appendix

Appendix A. Atawhai Programme Mission Statement and Expected Outcomes

Mission Statement

TKI [The Kindness Institute] exists to empower marginalised rangatahi in Aotearoa to transform their mental health and wellbeing, and that of those around them, through Te Whare Tapa Whā-guided programmes and advocacy designed to develop resilience and leadership.

Expected Outcomes

Atawhai aims to enhance youth development and improve mental wellbeing to achieve the following outcomes:

- a. Increased ability to regulate strong emotions such as anger and anxiety, manage stress, maintain healthy, communicative and forgiving relationships, and navigate conflict through breath and mindfulness techniques.
- b. Increased sense of belonging and participation through willingness and ability to participate in their communities, including as leaders and teachers.
- c. Greater sense of purpose, contribution and adding value, as well as increased choices and possibilities for their future.
- d. Stronger sense of identity and cultural connection through a focus on, and exploration of, Te Ao Māori and the individuals' cultural needs.
- e. Increased self-worth, self-efficacy and leadership capabilities, allowing rangatahi to tap into their own strengths and employ them in all areas of their lives, including leading and teaching others
- f. Improvement in holistic well-being and greater level of spiritual and cultural wellness.
- g. Reduced stress in the community and strengthen sense of connection through the flow-on effect of rangatahi sharing mental wellbeing tools they have learnt with whanau and community.

Appendix B. Questionnaire Instructions for Atawhai Course Rangatahi

QUESTIONNAIRE INSTRUCTIONS FOR ATAWHAI COURSE RANGATAHI

On the following two pages there are a number of statements. Please indicate how much you agree or disagree with each statement by circling the number alongside it using the scale below.

1	2	3	4	5
I have never thought or felt like this in the last week	I have rarely thought or felt like this in the last week	I have sometimes thought or felt like this in the last week	I have often thought or felt like this in the last week	I have always thought or felt like this in the last week

Here is an example for you

1. It is fun to ride my skateboard	1	2	3	4	5
------------------------------------	---	---	---	---	---

If you had fun every time you rode your skateboard in the last week you would choose number 5 (**always**). You would circle your answer like this

1. It is fun to ride my skateboard	1	2	3	4	5
------------------------------------	---	---	---	---	---

For the statements there are no ‘right’ or ‘wrong’ answers and no trick questions. The first answer that comes into your head is probably the right one for you.

These statements are in no way intended to cause you harm. If you feel upset whilst completing these questionnaires, or have difficulty answering a statement, please speak to a mentor from The Kindness Institute. If there are any statements you are unable to answer please put an ‘X’ next to them.

Now, let’s start. Please choose an ‘avatar’ (a fun name that you choose for yourself) and write it at the top of each of the two questionnaires (and any future questionnaires). Please make sure this is the same name you have written on your consent form in the space that says ‘avatar’. Choosing an ‘avatar’ will make sure the answers you write on the questionnaires are private and cannot be connected back to your real name. Please speak to a mentor from The Kindness Institute if you need help with this.

Appendix C. Combined Questionnaire on Mindfulness, Self-Regulation and Happiness

YOUR

AVATAR _____ **Date** _____

For each statement below please circle the number that best fits your experience **in the last week.**

1	2	3	4	5
I have never thought or felt like this in the last week	I have rarely thought or felt like this in the last week	I have sometimes thought or felt like this in the last week	I have often thought or felt like this in the last week	I have always thought or felt like this in the last week

2. I pay attention to things like the wind in my hair or sun on my face.	1	2	3	4	5
3. I notice things in nature, such as colours, shapes, textures, or patterns of light and shadow.	1	2	3	4	5
4. I find it difficult to stay focused on what's happening right now.	1	2	3	4	5
5. I rush through activities without taking notice of them.	1	2	3	4	5
6. I make judgments about whether my thoughts are good or bad.	1	2	3	4	5
7. I think some of my emotions are bad or wrong and I shouldn't feel them.	1	2	3	4	5
8. I'm good at finding words to describe my feelings.	1	2	3	4	5
9. When I feel something in my body, it's hard for me to find the right words to describe it.	1	2	3	4	5
10. Usually when I have upsetting thoughts or images I just notice them without reacting.	1	2	3	4	5
11. When I have upsetting thoughts or images, I feel calm soon after.	1	2	3	4	5
12. I feel that life is good.	1	2	3	4	5
13. I have warm feelings towards almost everyone.	1	2	3	4	5
14. I do not think that the world is a good place.	1	2	3	4	5
15. I laugh a lot.	1	2	3	4	5
16. There is a gap between what I would like to do and what I have done.	1	2	3	4	5
17. I am very happy.	1	2	3	4	5
18. I see the good in some things.	1	2	3	4	5
19. I feel that I am not always in control of my life.	1	2	3	4	5
20. I feel able to take on anything.	1	2	3	4	5
21. I do not have particularly happy memories of the past.	1	2	3	4	5
22. If something isn't going according to my plans, I change my actions to try and reach my goal.	1	2	3	4	5
23. I can find ways to make myself study or work even when my friends want to go out.	1	2	3	4	5
24. When I have a serious disagreement with someone, I can talk calmly about it without losing control.	1	2	3	4	5

25. I work carefully when I know something will be tricky.	1	2	3	4	5
26. I am usually aware of my feelings before I let them out.	1	2	3	4	5
27. In class, or at work, I can concentrate on my tasks even if my friends are talking.	1	2	3	4	5
28. When I'm excited about reaching a goal (e.g., getting my drivers' license), it's easy to start working toward it.	1	2	3	4	5
29. I can find a way to stick with my plans and goals, even when it's tough.	1	2	3	4	5
30. When I have a big project, I can keep working on it.	1	2	3	4	5
31. I can resist doing something when I know I shouldn't do it.	1	2	3	4	5

Appendix D. Combined Questionnaire on RCADS & SCS

YOUR

AVATAR _____ **Date** _____

For each statement below please circle the number that best fits your experience **in the last week**.

1	2	3	4	5
I have never thought or felt like this in the last week	I have rarely thought or felt like this in the last week	I have sometimes thought or felt like this in the last week	I have often thought or felt like this in the last week	I have always thought or felt like this in the last week

1. When I fail at something important to me, I experience feelings of ‘I am not enough’.	1	2	3	4	5
2. I try to be understanding and patient towards parts of my personality I don’t like.	1	2	3	4	5
3. When something painful happens I try to understand the situation fairly.	1	2	3	4	5
4. When I’m feeling down, I often feel like most other people are probably happier than I am.	1	2	3	4	5
5. I try to see my failures as part of being a human being.	1	2	3	4	5
6. When I’m going through a very hard time, I am kind and caring towards myself.	1	2	3	4	5
7. When something upsets me, I try to keep my emotions in balance.	1	2	3	4	5
8. When I fail at something that’s important to me, I tend to feel alone in my failure.	1	2	3	4	5
9. When I’m feeling down I tend to obsess and focus on everything that’s wrong.	1	2	3	4	5
10. I’m judgemental about my own flaws.	1	2	3	4	5
11. I worry when I think I have done poorly at something.	1	2	3	4	5
12. I would feel afraid of being on my own at home.	1	2	3	4	5
13. I worry that something awful will happen to someone in my family.	1	2	3	4	5
14. I am afraid of being in crowded places (like shopping centers, the movies, buses, busy playgrounds).	1	2	3	4	5
15. I worry what other people think of me.	1	2	3	4	5
16. I feel scared if I have to sleep on my own.	1	2	3	4	5
17. I suddenly become dizzy or faint when there is no reason for this.	1	2	3	4	5
18. I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order).	1	2	3	4	5

19. I suddenly start to tremble or shake when there is no reason for this.	1	2	3	4	5
20. I have to think of special thoughts (like numbers or words) to stop bad things from happening.	1	2	3	4	5
21. I think about death.	1	2	3	4	5
22. I worry that I will suddenly get a scared feeling when there is nothing to be afraid of.	1	2	3	4	5
23. I feel afraid that I will make a fool of myself in front of people.	1	2	3	4	5
24. I have to do some things in just the right way to stop bad things from happening.	1	2	3	4	5
25. I worry that something bad will happen to me.	1	2	3	4	5

Appendix E. Rangatahi Daily Debrief Questions

RANGATAHI DAILY DEBRIEF QUESTIONS

1. Which taha of Te Whare Tapa Wha did you feel most connected to today & why?
Which one do you need to strengthen & how can we help?
2. When did you use the mindfulness pillars today? (i.e i used acceptance when I didn't want to do yoga but I accepted I was there and I gave it my all. I used trust when I went and spoke to the group, usually I would be shy)
3. What tools from today's morning session (mindfulness, yoga, the work) were the most helpful for you & what did you learn?
4. What are you proud of yourself for having done today?
(emotionally, mentally, physically or creatively i.e did you overcome anything emotionally etc)
5. How would you like to challenge yourself tomorrow? (i.e participate in more conversations, be more focused in class, go hard at yoga etc.), what is your intention for tomorrow?

Appendix F. Rangatahi Deep Debrief Questions

RANGATAHI DEEP DEBRIEF QUESTIONS

DAY 5 - DEEP DIVE

1. How do you feel after a week of ATAWHAI?
2. What's the main thing you've learnt this week?
3. What's an example of when you've used the tools this week at home / outside of ATAWHAI?
4. What tools / activities have been most helpful for you?
5. Have you shared any of these skills with your whanau/friends?
6. Do you feel more connected to your culture or identity? If so, how?
7. What have you enjoyed the most about this programme, and why?
8. What have you learnt about yourself this week?
9. How could this program be better?

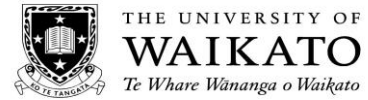
Appendix G. Mentor Deep Debrief Questions

MENTOR DEEP DEBRIEF QUESTIONS

DAY 5 DEEP DIVE

1. Have you observed any changes in the rangatahi during the Atawhai programme, particularly in regard to emotional, behavioural or spiritual? If so, what were they?
2. Have your rangatahi told you that they have used any of the skills used at ATAWHAI, at home or outside of Atawhai? If so, please give examples.
3. Have your rangatahi told you that they have shared any of their new skills with whanau/friends? If so, please give examples.
4. What did you learn this week? What benefits have you personally had from doing ATAWHAI, and the different elements of the programme?
5. What are the benefits you think the rangatahi are getting from mindfulness, stress management tools, the work of Byron Katie and yoga?
6. What benefits do you think the rangatahi are getting from the overall program?
7. Is there anything else we could do to support you in your role?
8. What suggestions do you have to improve the program overall?
9. Have you used any of the skills you have learnt, at home?

Appendix H. Participant Information Sheet – Atawhai Course Participants



An Evaluation of The Kindness Institute's Atawhai Programme

Participant Information Sheet – Atawhai Course Participants

Tēnā koe,

Our names are Sue McAllister and Courtney White and we are Masters students at The University of Waikato. We have been asked by Kristina Cavit to do some research for The Kindness Institute. We would like to invite you to be part of this research. Once it is completed, we hope our work will support the wellbeing of rangatahi like yourself. Please take a few minutes to read the following information.

Purpose of the research - The focus of our research is to learn about your experiences at The Kindness Institute's Atawhai programme. We would like to find out how learning mindfulness, meditation and yoga affects your life. The findings of this research will be used to understand the Atawhai programme and its contribution to the wellbeing of rangatahi.

Participation - We have two questionnaires we would like you to fill out. They will take about 20 minutes to complete. Your participation is voluntary, so you do not have to take part if you don't want to. If you take part now you may decline to answer any question, or you may decide to withdraw from the project up to one week after completing the questionnaires. There are no consequences if you decide not to take part. If you do take part a summary of our research will be made available to you when the project is complete. Results from this research may be included in a future university publication. These questionnaires have been answered before by young people like yourself. They should not cause you any harm. If answering any questions causes you to be upset, please speak to a mentor from The Kindness Institute. They will be able to help you find someone to speak to that can help you.

Confidentiality - Your name will not be included in any written material that comes from this research.

Storage of collected information - Any information we receive from you will be securely stored for a minimum of five years at the University of Waikato. It will then be destroyed. Only the researchers and their supervisor will see the information.

If you have any enquiries about this research, or you want to correct any personal information you have given us, please contact Sue McAllister via email at smm54@students.waikato.ac.nz , Courtney White at cpw11@students.waikato.ac.nz or Robert Isler (our research supervisor) at robert.isler@waikato.ac.nz

This research project has been approved by the Human Research Ethics Committee (Health) at the University of Waikato as HREC(Health)2019#62. Any questions or concerns about the ethical conduct of this research may be sent to the Secretary of the Committee, email humanethics@waikato.ac.nz, postal address, Human Research Ethics Committee (Health), University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Appendix I. Participant Consent Form – Atawhai Course Participants



CONSENT FORM

A completed copy of this form should be retained by both the researcher and the participant.

Research Project: An evaluation of The Kindness Institute’s Atawhai programme

Please complete the following checklist. Tick () the appropriate box for each point.	YES	NO
1. I have read the participant information sheet (or it has been read to me) and I understand it		
2. I have been given enough time to decide whether or not to participate in this study		
3. I understand that taking part in this study is voluntary and that I may withdraw from the study up to a week after I complete the questionnaires		
4. I know who to contact if I have any questions about the study		
5. I understand that the information supplied by me could be used in future academic publications		
6. I understand that participation in this study is confidential and my name will not be used in any reports		
7. I wish to receive a summary of the evaluation findings		
8. I understand that should I wish to withdraw from this research I can speak to the researchers (Sue McAllister or Courtney White)		
9. I understand the data for this research will be securely stored at the University of Waikato for five years and then destroyed		
10. Please pick an ‘avatar’ for yourself and write it here _____ An ‘avatar’ is a fun name that only you will know. It will keep your answers private by ensuring your real name is not written on the questionnaires. Please write this ‘avatar’ at the top of both of the questionnaires you complete.		

Declaration by participant:

I agree to participate in this research project and I understand that I may withdraw up to a week after I complete the questionnaires. If I have any concerns about this project, I may contact the University of Waikato Human Research Ethics Committee email humanethics@waikato.ac.nz The projects approval code is HREC(Health)2019#62.

Participant's name (Please print):

Signature

Date:

Parents name (if under 16 years)

Parents signature

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it. I believe that the participant understands the study and has given informed consent to participate.

Researcher's name (Please print):

Signature:

Date:

Appendix J. Participation Information Sheet – Mentors



An Evaluation of The Kindness Institute's Atawhai Programme

Participant Information Sheet – Mentors

Tēnā koe,

My name is Sue McAllister and I am a Masters student at The University of Waikato. Myself, and another student, Courtney White, have been asked by Kristina Cavit to do some research for The Kindness Institute. We would like to invite you to be part of this research. Once it is completed we hope our research findings will contribute to the wellbeing of rangatahi. Please take a few minutes to read the following information.

Purpose of the research - Our research will focus on mindfulness, self-regulation, positive emotion, anxiety, compassion, and negative emotion. The three main questions that will be examined are: What is the effect of learning and practicing mindfulness and compassion training on self-regulation and positive emotions? Does Atawhai decrease levels of anxiety and increase levels of self-confidence? Can the skills youth learn be fitted into their home, family and community to enable any behaviour change to be sustainable long-term?

Participation - As an Atawhai mentor we would like to use your answers from the Daily Debriefs as part of our research. Your participation in the research is voluntary and there are no consequences for declining to participate.

You have the right to:

- ask any further questions about the study during and after your participation.
- ask to withdraw your material and participation up to one week after participation.
- be given access to the findings from the study, when it is concluded.

We expect the major outcome from this research to be a full technical report that can be viewed on The University of Waikato's website under the Research Commons page.

Confidentiality - All information you provide is confidential and your name will not be used in the final report.

Storage of collected information - Any information we receive from you will be securely stored for a minimum of five years at the University of Waikato. It will then be destroyed. Only the researchers and their supervisor will see the information.

Thank you very much for your time and help in making this study possible. If you have any queries or wish to know more please contact Sue at:

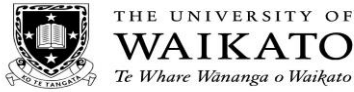
Sue McAllister

Email: smm54@students.waikato.ac.nz

Our supervisor is Associate Professor Robert Isler, Email: robert.isler@waikato.ac.nz Office phone:
+64 7 837 9227

This research project has been approved by the Human Research Ethics Committee (Health) at the University of Waikato as HREC(Health)2019#62. Any questions or concerns about the ethical conduct of this research may be sent to the Secretary of the Committee, email humanethics@waikato.ac.nz, postal address, Human Research Ethics Committee (Health), University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Appendix K. Consent Form for Mentors for Daily Debriefs



An Evaluation of The Kindness Institute's Atawhai Programme

Consent Form for Mentors for Daily Debriefs

I have read the **Participant Information Sheet** for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study within one week of participating in the daily debriefs. I agree to provide information to the researchers under the conditions of confidentiality set out in the **Participant Information Sheet**.

I agree to information I have supplied in the following forums to be used in the study -

The daily debriefs (Mon 7/10/19 to Thursday 10/10/19) YES/NO (please circle one)

The day 5 deep debrief (Friday 11/10/19) YES/NO (please circle one)

I agree to participate in this study under the conditions set out in the **Participant Information Sheet**.

Participant's Signature: _____

Participant's Name: _____

Date: _____

If you have any queries or wish to know more please write to us at:

Sue McAllister: smm54@students.waikato.ac.nz

This research project has been approved by the University of Waikato Human Research Ethics Committee (Health). The projects approval code is HREC(Health)2019#62. Any queries regarding the ethical conduct of this project can be directed to: humanethics@waikato.ac.nz or, our supervisor:

Associate Professor Robert Isler

Email: robert.isler@waikato.ac.nz

Office phone: +64 7 837 9227

Appendix L. Human Research Ethics Committee Approval Letter

The University of Waikato
Private Bag 3105
Gate 1, Knighton Road
Hamilton, New Zealand

Human Research Ethics Committee
Julie Barbour
Telephone: +64 7 837 9336
Email: humanethics@waikato.ac.nz



22 August 2019

Sue McAllister, Courtney White
School of Psychology
FASS
By email: smm54@students.waikato.ac.nz
cpw11@students.waikato.ac.nz

Dear Sue and Courtney

HREC(Health)2019#62 : An evaluation of the Atawhai programme conducted by The Kindness Institute in Auckland, Charitable Trust (www.kindnessinstitute.com)

Thank you for submitting your amended application HREC(Health)2019#62 for ethical approval.

We are now pleased to provide formal approval for your project, where you will recruit three groups of participants. You will collect information in order to evaluate the efficacy of the Atawhai programme. Group 1 will comprise young people selected for the Atawhai programme, who will complete the following measures: ASRI, FFMQ, OHQ, self-compassion scale, RADCS; Group 2 will comprise programme leaders; and Group 3 will comprise programme alumni.

Please contact the committee by email (humanethics@waikato.ac.nz) if you wish to make changes to your project as it unfolds, quoting your application number with your future correspondence. Any minor changes or additions to the approved research activities can be handled outside the monthly application cycle.

We wish you all the best with your research.

Regards,



Julie Barbour PhD
Chairperson
University of Waikato Human Research Ethics Committee

Appendix M. Letter of Support – The Kindness Institute Cultural Advisor and Board Member

Jessikha Leatham-Vlasic
11 Awhiorangi Promenade,
Swanson,
Auckland

24th May, 2019

Tēnā kōrua,

As a board member and the cultural advisor of The Kindness Institute, I can confirm that your proposed evaluation of the ATAWHAI programme is culturally sound and supportive of the needs of our rangatahi. We are all looking forward to seeing the results and working with you all.

Ngā manaakitanga ki runga i a koutou me ngā mahi kei mua i te aroaro,

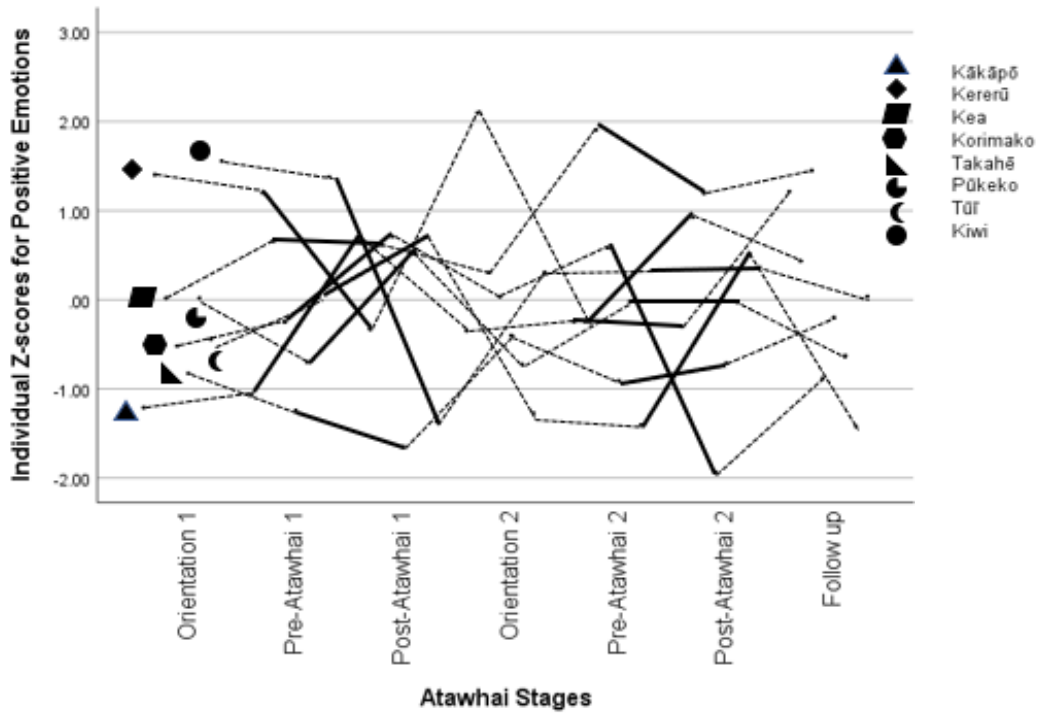
Nāku iti nei,

Nā Jessikha

Appendix N. Individual Z-scores for Positive Emotions

Figure 6

Individual Z-scores for Positive Emotions



Note. Figure 6 demonstrates a z-score line graph of individual participants' composite positive emotions (mindfulness, self-regulation, happiness and compassion) measured over time at Atawhai. The participants are represented by their Avatar names and time is represented by the seven stages of Atawhai (Orient 1 to Follow Up).

Appendix O. Character Strengths (Seligman, 2011)

Wisdom and knowledge – creativity, curiosity, judgement, love of learning, perspective

Courage – bravery, perseverance, honesty, zest

Humanity and love – love, kindness, social intelligence

Justice – teamwork, fairness, leadership

Temperance – forgiveness, humility, prudence, self-regulation

Transcendence – appreciation of beauty and excellence, gratitude, hope, humour, spirituality