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**An Investigation into the Design, Applicability and Evaluation of a Computerised  
Cognitive Behavioural Therapy Programme-SPARX for Māori Young People  
Experiencing Mild to Moderate Depression**

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## Abstract

Depression is a major health issue amongst adolescents in New Zealand particularly for Māori. This research is a part of a larger study, in which a Computerised Cognitive Behavioural Therapy programme (CCBT)-SPARX was designed and evaluated. Four studies exploring the design, applicability and efficacy of SPARX for Māori adolescents experiencing mild to moderate depression have been included in this thesis. In study one I investigated the design and content of the CCBT programme from a Māori perspective using a qualitative methodology. Three different groups were interviewed, taitamarki Kapa Haka group (N=8), taitamariki (adolescent) mothers (N=4) and whānau (7 parents and 7 taitamariki). Results revealed that SPARX taught Cognitive Behavioural Therapy (CBT) skills (particularly relaxation), it was like a computer game that helped with depression and the Māori graphics were applicable to taitamariki. In study two I recruited seven taitamariki to complete SPARX (seven modules). The Child Depression Rating Scale-Revised (CDRS-R) and secondary self-rating scales of depression, anxiety and quality of life were administered before intervention, post treatment and at five-month follow up. The mean scores on the CDRS-R dropped substantially to within normal range at post intervention 22.57 (CI=-8.52-36.63,  $p=.008$ ) and this decrease was maintained at five month follow up 17.71 (CI=0.77-34.66,  $p=.043$ ). Secondary measures showed statistically significant improvement for anxiety at months two and five and quality of life at months two and five. Both self report questionnaires at months two and five showed high satisfaction levels. In study three, participants completed a semi-structured interview (N=6) at completion of intervention. Taitamariki found SPARX to be helpful because it taught relaxation and cognitive restructuring skills and helped improve mood. The ability to customise the characters with Māori designs appeared to enhance cultural identity. In study four I analysed the Māori

participant data from the main randomised control trial (N=45) comparing SPARX with treatment as usual (TAU). This study confirmed findings from the open trial with initial gains at post intervention (SPARX, -5.13, TAU -6.87) maintained at five month follow up, (SPARX, -5.50, TAU -5.40), and showed that for this cohort SPARX was as effective as treatment as usual. The generalisability is limited by the small sample sizes. These results suggest SPARX is an effective treatment for mild to moderate depression.

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## Glossary of Māori Terms

<b>Atua</b>	God
<b>Hapu</b>	Sub tribe
<b>Hinengaro</b>	Mind, intellect, psychology
<b>Hongi</b>	Greeting process where noses are pressed together to symbolise the joining of breathe and spirit
<b>Iwi</b>	Tribe
<b>Kai</b>	Food
<b>Kapa Haka</b>	Traditional group that performs Māori songs and dance
<b>Karakia</b>	Prayers
<b>Kaumatua</b>	Elder, guardian of knowledge and traditions
<b>Kaupapa</b>	A philosophy incorporating the knowledge, skills, attitudes and values of Māori
<b>Māori</b>	Indigenous people of New Zealand
<b>Marae</b>	A designated area of land with buildings on it where Māori meet to gather
<b>Mau rākau</b>	Training in the skilled use of traditional weapons
<b>Moko</b>	Tattoo
<b>Mihi whakatau</b>	Welcome ceremony
<b>Ngati Tama</b>	Tribe
<b>Pakeha</b>	New Zealander who is non Māori
<b>Powhiri</b>	Traditional welcome
<b>Taiaha</b>	Weapon, similar to a spear

<b>Taitamariki</b>	Adolescent
<b>Taranaki</b>	Name for the area of land in and around New Plymouth
<b>Te ha</b>	Breath
<b>Te reo</b>	Māori language
<b>Tikanga</b>	Māori cultural guidelines, values
<b>Tinana</b>	Body
<b>Tupuna</b>	Ancestor
<b>Waiata</b>	Song
<b>Wairua</b>	Spirit, inner spirit
<b>Whakapapa</b>	Genealogy, lineage
<b>Whaikorero</b>	Speech
<b>Whakawhānaungatanga</b>	Interrelationships between others
<b>Whānau</b>	Family
<b>Whānau ora</b>	Healthy Whānau