

# Computer vs. human

## Adolescents in Alternative Education contrast cCBT and face-to-face therapy

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### Background

**SPARX** is a computerised Cognitive Behavioural Therapy (cCBT) program for depression. It utilizes a bicentric frame of reference and gamification (1). SPARX has been reported to be appealing (2-4) and to be as effective as treatment as usual for young people with depression (2).

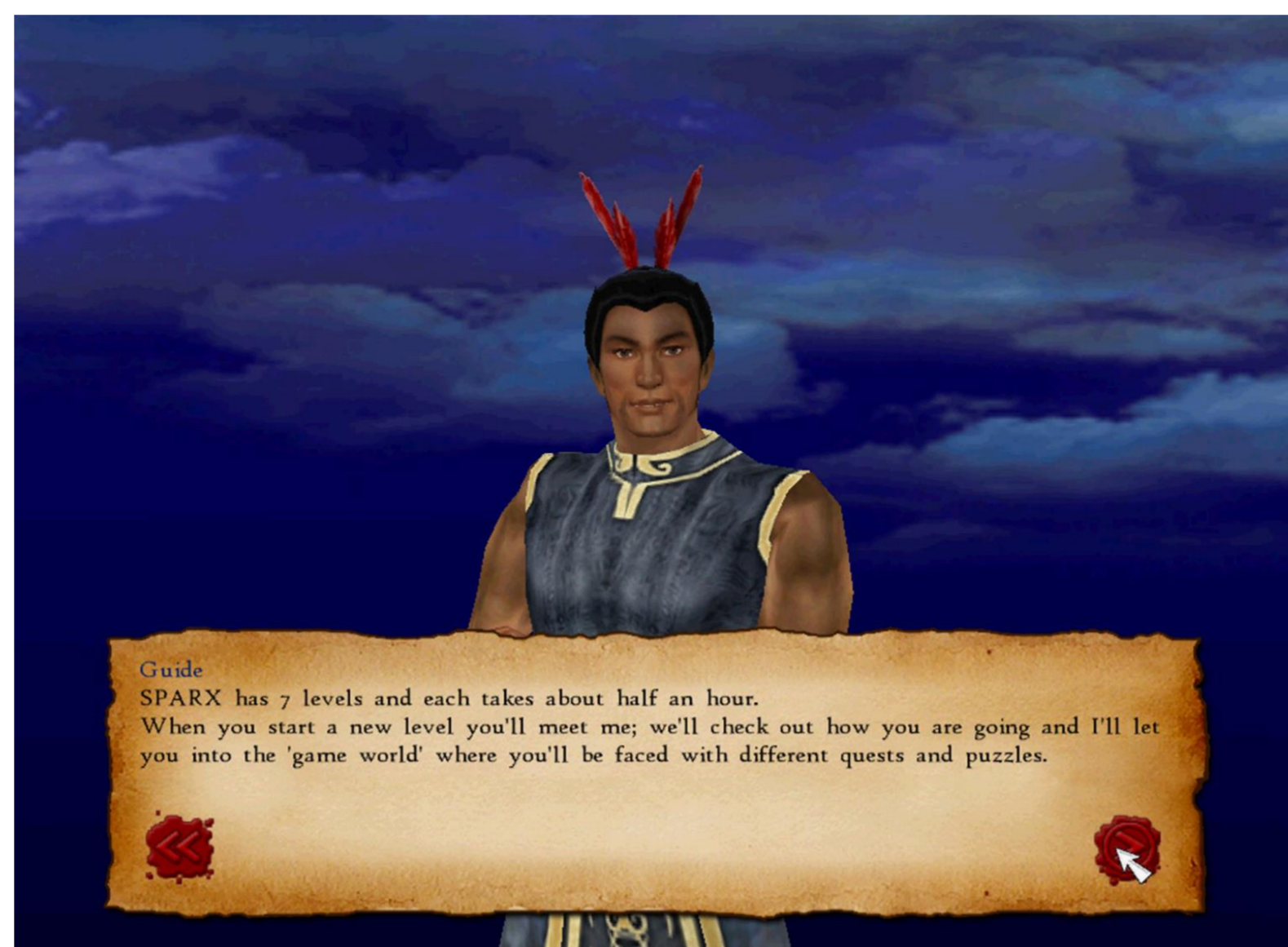
In New Zealand, **Alternative Education** (AE) refers to small schools for 13-16 year olds who have been excluded or alienated from mainstream education, and who are considered unable or unwilling to attend mainstream schools. Students in AE have high rates of depression, suicide, substance use, problem behaviour and family and school difficulties.

We carried out a randomized controlled trial of immediate compared to delayed SPARX, with 44 adolescents in AE. Results for those with depression have been reported (5). Semi-structured interviews were carried out with participants after they had had the opportunity to complete SPARX. Many participants contrasted their experience of SPARX with previous experiences of face-to-face therapy.



### Method

Content analysis of semi-structured interviews with 39 adolescents (30 with symptoms or depression at baseline; 24 males; 15 Māori; 12 Pacific Island; all 13-16 years). Interview content where participants compared cCBT to face-to-face therapy was analyzed using a general inductive approach.



### Results

Young people highlighted that **cCBT is a very different experience from face-to-face therapy**:

**Talking about feelings is too intense**

*It can be awkward, people studying you in counselling and it goes on too long.*

*It's hard to talk to adults, too intense.*

*This [computerised therapy] is less intrusive than therapy.*

**The computer is empowering**

*SPARX tells you the info and lets you figure out how to do it. You have more control and are more hands on.*

*Its less complicated than going to a counsellor and having to blurt out how you feel each week. You have more control.*

*[with computerised therapy] you can go at your own pace.*



### Results contin

#### Telepresence

*The Guide was on to it... it felt personal, you know, like he was talking to you, like you got to know him.*

*The Bird of Hope is always there to help you. It was like having an angel.*

#### Different reasons for adherence

*A counselor is more compelling to come back to 'cause they will call you, send appointments. But I did come back 'cause I wanted to see what happened.*

#### The computer is easy to learn from

*I liked the shield [against depression], I was trying to remember that stuff, it helped.*

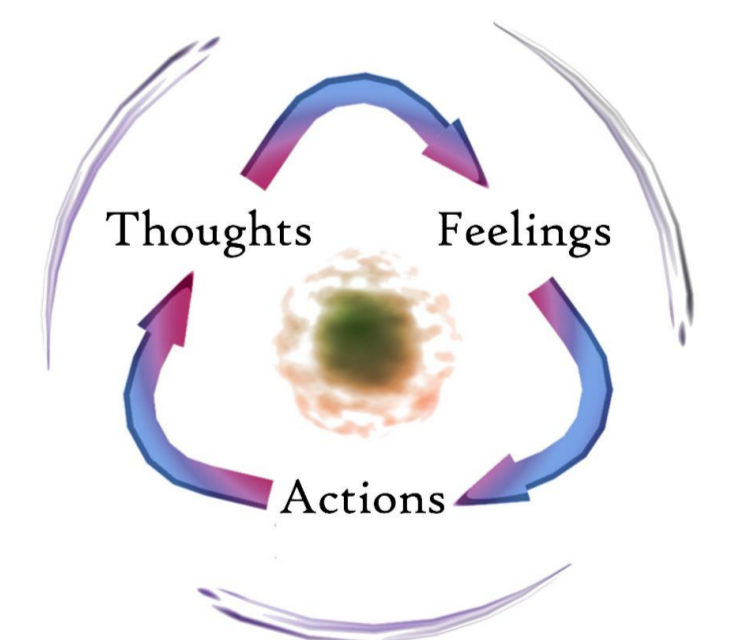
*Before I have been told about this [skill], but not shown. This makes it easier to learn.*

Other themes included the computer program being more convenient, less judgmental but also less responsive to personal needs than a face-to-face therapist. Young people were clear that **preferences vary** and young people should have choices available to them

*It is a different way. It offers an option that will suit some.*

### Conclusion

Computerised CBT and face-to-face therapy should not be considered the same. Opportunities to utilize the strengths and address the weaknesses of computerised therapy and the importance of personal preferences should be considered.



### References

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- 2 Merry, S., et al. (2012). "The effectiveness of SPARX, a computerised self help intervention for adolescents seeking help for depression: Randomised controlled non-inferiority trial." *BMJ: British Medical Journal* **344**(7857): 1-16.
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- 4 Cheek C., et al. (2014) Views of Young People in Rural Australia on SPARX, a Fantasy World Developed for New Zealand Youth With Depression *JMIR Serious Games* **2**(1):e3
- 5 Fleming, T., et al. (2012). "A pragmatic randomized controlled trial of computerized CBT (SPARX) for symptoms of depression among adolescents excluded from mainstream education." *Behavioural and cognitive psychotherapy* **40**(5): 529-541.