Dragons of Afterlands

Use of 'serious games' in improving adolescent socio-emotional skills
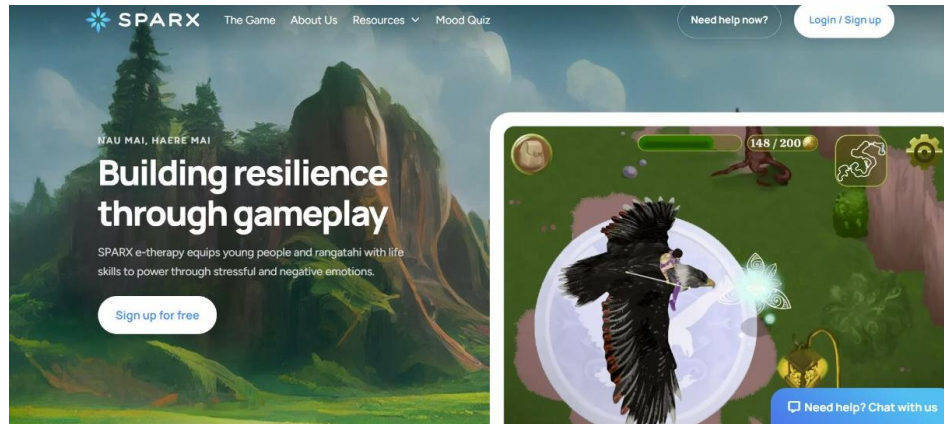
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WHAT ARE SERIOUS GAMES?

Umbrella term for any game-based initiative that has a 'serious' agenda. The goal is education, or providing an opportunity to practice or refine a new skill.

EXAMPLES OF SERIOUS GAMES

Lumi Nova: Tales of Courage

Scientific, fun and stigma-free digital therapy for childhood anxiety

Recommended by
NICE National Institute for Health and Care Excellence

DRAGONS OF AFTERLANDS

- Designed by a research psychologist at PlayWellForLife – a digital games company

- Combines a physical board with augmented reality

- Aims to improve socio-emotional skills

- Wellbeing challenges exist across 4 realms – social, emotional, cognitive and physical

- https://vimeo.com/jonaitken/review/1090099221/3b41377dbc

WELLBEING CHALLENGES

- Underpinned by principles of Cognitive Behavioral Therapy (CBT) and narrative therapy

- Emotional realm – players are given a scenario and they have to label what the character would be feeling (developing emotional regulation and awareness skills?)

- Cognitive realm – players are given a scenario, and what the character may be thinking, and have to generate alternative thoughts (developing awareness of their thoughts?)

- Social realm – players are asked to solve a social problem (developing social problem-solving skills?)

- Physical realm – players are asked to manage stressful situations using physical activity, emotion regulation exercises and behaviour activation (developing emotion regulation skills?)

STUDY DESIGN

- Recruited 71 female participants from across London

  - Average age 12

  - Ethnicity – highest proportion of participants were Black British, Caribbean, or African, roughly equal were Asian or Asian British and from multiple ethnic groups, with a minority being white

  - 30% receiving free school meals

  - 10% had a mental health diagnosis

- Teachers allocated students to the intervention group or control group (PHSE lessons as usual)

- Completed questionnaires measuring: wellbeing, emotional awareness and emotion regulation, cognitive awareness and social problem solving

- Played the game for 6 1 hour sessions, and completed the questionnaires before playing the game, after the 6 sessions and at a 2-4 week follow up, completed qualitative interviews

DOES THE GAME IMPROVE WELLBEING?

WEMWBS Wellbeing Scores at Each Time-point for the Intervention and Control Groups
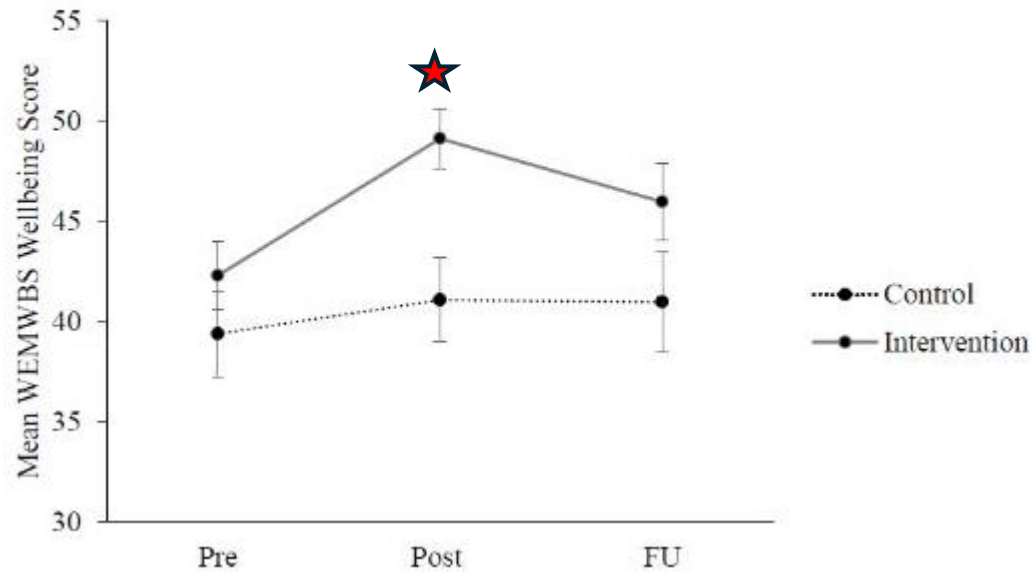
WHO-5 Wellbeing Scores at Each Time-point for the Intervention and Control Groups
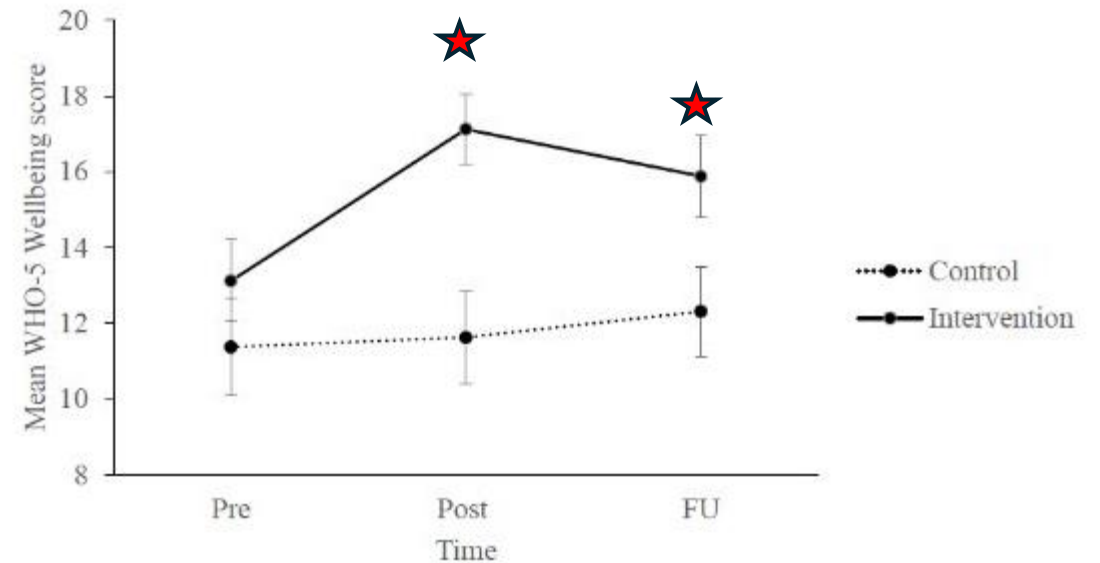
Improvements remained significant for the WHO-5 measure at 2-4 week follow up, but not for the WEMWBS measure

DOES THE GAME IMPROVE SOCIO-EMOTIONAL SKILLS?

Measure	Group	Pre	Post	F	p	η_p^2
		M (SD)	M (SD)			
WEMWBS	Control	42.8 (9.8)	43.6 (9.7)	4.75	**.033***	.076
	Intervention	44.7 (10.6)	49.8 (9.2)			
WHO-5	Control	12.8 (5.9)	12.7 (5.6)	4.05	**.049***	.065
	Intervention	13.8 (6.8)	16.6 (5.7)			
Emotional Awareness	Control	20.8 (3.6)	18.5 (3.1)	6.07	**.017***	.095
	Intervention	20.0 (5.8)	21.2 (5.5)			
Emotional Regulation	Control	13.0 (4.1)	15.3 (2.5)	15.46	**<.001*****	.213
	Intervention	14.0 (6.8)	11.1 (4.7)			
Cognitive Awareness	Control	11.8 (2.7)	11.7 (2.4)	2.20	.144	.037
	Intervention	12.2 (2.7)	13.5 (3.5)			
SPS	Control	16.7 (6.3)	17.3 (5.5)	1.50	.226	.025
	Intervention	17.7 (8.6)	20.8 (8.1)			

- Significant improvement in emotional awareness and emotion regulation
- An increase, but not a significant improvement in cognitive awareness or social problem solving

NEW STUDY

- Game has been updated

- Running a new study with 11-18 year olds

- New design: running in PSHE lessons or as an afterschool club

- Testing new outcomes based on qualitative feedback:

  - Closeness in relationships

  - Social communication (including sociability, self-disclosure, decoding the emotions of others and assertiveness)

- Recruitment is open!

INTERESTED?

Join us to play the game at break and lunchtime

Scan the QR code to sign up and hear more information about the study and recruitment

Or email annie.bird@rhul.ac.uk