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The players' perspective of *Reach Out Central*: A therapeutic interactive online game

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Abstract

Therapeutic online games are potentially a valuable way of improving the mental health of young people. The purpose of this paper is to discuss the qualitative component of a formal evaluation conducted on *Reach Out Central* (ROC), an online game for 16-25 year olds which aims to improve mental health. Participants completing a post-program survey from the evaluation ($n=154$) were required to respond to two open-ended questions; what they liked most, and least, about ROC. Responses indicate that online games can be a successful way of educating, as well as attracting and engaging, young people. Suggestions are made regarding issues future developers should take into consideration when developing programs of a similar nature.

Keywords: *Young people; Mental health; Internet; Online game; Resilience*

Introduction

Research informs us that the internet is a commonly utilised source of information by youth for a wide range of health and mental health topics ranging from the relatively innocuous (e.g., warts) to the more personal (e.g., sexually transmitted diseases) (Borzekowski & Rickert, 2001; Escoffrey et al, 2005). A limitation of informational sites is that they are often heavily text-based, presuming the reader to have both an adequate literacy level and comprehension skills. This can be a deterrent to youth and thereby render such sites ineffectual. The use of games is one method of overcoming such problems and reaching a wider youth-based audience. In child and adolescent counselling, the use of games as a tool to aid in the therapeutic process is not new. For example, artistic endeavors such as drawing, construction and puppet-play have been well researched (Sharry, 2004).

Nevertheless, the use of internet gaming as a delivery medium for therapeutic or preventative material relating

to mental health is relatively unexplored territory. Although, it has been previously noted that programs incorporating graphics, animation, sound effects and cartoons are effective in attracting the young person's attention and, of particular importance, enhancing their understanding and retention of the intended message (Evans, Collier, Crook, Garrud, Harris, Mackinlay & Resell, 1998; Rieber & Kini, 1991; Ritterband, Cox, Gordon, Borowitz, Kovatchev, Walker & Sutphen, 2006). One such online game undergoing initial testing in Ireland is *Personal Investigator* (PI). Intended for use in therapy sessions for adolescents with mental health problems and social skills deficits, the purpose of PI is to assist with structuring therapy sessions and setting therapeutic goals. Preliminary research indicates that PI is effective in both engaging adolescents and helping them to share their story (Coyle, Matthews, Sharry, Nisbet & Doherty, 2005; Matthews, Coyle & Anthony, 2006).

Another online game, and the focus of this paper, is *Reach Out Central* (ROC) created for young people aged 16-25 years. ROC was designed to improve mental health literacy, increase problem solving skills, promote the capacity to challenge thoughts, and apply learned skills to improve mental health. Recently evaluated by the Swinburne University eTherapy Unit, ROC use was found to reduce psychological distress, alcohol use and avoidance behaviour and improve life satisfaction, resilience, problem solving and help-seeking behaviours. The purpose of this paper is to report on the qualitative component of this evaluation with the intention of providing future developers with design considerations when developing similar game-based programs for youth.

Method

Participants

The sample comprised of 154 young people (116 females, 38 males) aged 16-25 years (mean age=20.5, SD=2.1) completing the post-program survey component of the formal evaluation.

Reach Out Central

ROC (www.reachout.com.au) is a web-based interactive educational game utilising cognitive-behavioural principles designed to assist young people to identify and develop practical coping skills for dealing with life stressors that may be precursors to mental health problems. ROC features 'real-life' scenarios and uses role-play to encourage young people to think about solutions to common problems, consolidate skills learnt and to apply them offline. Initial content focuses on skills such as problem solving, challenging negative beliefs and negotiating relationships. For example, player's have a mood meter that is viewable at all times during gameplay. The player's mood has an effect on conversation and social interactions and this encourages the player to perform specific game actions that can improve their mood meter (such as physical activity, giving up drugs) in order to more easily progress in the game.

Procedure

Four weeks after completing a trial of ROC, participants were asked to complete an online survey via an online questionnaire management program (www.zoomerang.com). The qualitative component of the survey was comprised of two questions, (1) 'What did you like best about ROC?', and (2) 'What did you like least about ROC?' As both questions were mandatory, participants provided at least one response to each question. Participants were also able to provide unsolicited responses in an open text box at the end of the survey.

All responses were manually analysed for commonly occurring themes. In many cases, participants provided responses that fit appropriately into multiple themes. Where responses did not logically fit into a cohesive theme they were categorised as 'other'.

Results

Positive aspects of ROC

Table 1 provides the themes derived from what participants reported as the positive aspects of ROC.

Table 1.
'What did you like most about ROC?' (N = 154)

Theme	Total (n)
Game play (interactivity, response options, choices, storyline, characters, fun)	69
Informative/educative	48
Game design (interface, music, graphics)	40
Realistic / relatable (including language)	30
Usability	9
Other	8
Nothing	6
Safe environment	4
Availability / accessibility	4
Distraction / escape	4
Interesting	4
Novelty	4

Participants most commonly identified elements of ROC that related to 'game play' as what they most liked about the game ($n=69$). Game play included the interactive nature of the medium, such as the use of SMS reminders, having the capacity to control the game by choosing different courses of actions and responses, the ability to explore various locations and the capacity to interact with objects and make friends. Responses in this theme also included comments regarding the engaging nature of the storyline and the general enjoyment of playing the game.

"That the characters in ROC reacted to how you reacted to them"

"Choosing my own replies to the characters in different scenarios"

"The storylines - I played a few times and deliberately made different choices, but the way the story played out was always engaging."

"it was fun . . . I actually enjoyed playing it"

The second most common response ($n=48$) was that participants found ROC to be instructive/educative and relevant to the target age group.

"...filled with ways to cope with things or help others cope"

"The information I was provided with, it helped me rethink some things"

"Just the fact that it dealt with problems similar to the ones teenagers and young adults have at their age. I know a few people who I think could really benefit from playing the game"

The design and aesthetic element of ROC was also identified as a common positive theme. Participants particularly liked the selection of music (and capacity to change songs where so desired), the graphics and general layout.

The realism and relatable nature of ROC was identified as a positive aspect both in regards to the scenarios/storylines/characters that were presented and the range of response options participants were able to choose from. The language used for dialogue also helped participants connect with the game.

"The fact that it mirrored real life situations was excellent"

"How well the game reflected situations in real life and gave you more alternative as to things that you would generally say or do in those situations...the game actually allowed you to say 'yes with a but'"

"The fact that the script writers didn't feel the need to be inhibited about swearing at appropriate times."

Some participants ($n=19$) stated that there was 'nothing' that they liked about the game. For one participant their comments stemmed from the inability to log into the game (due to technical problems), for another, they were put off by the uncertainty they experienced about what to do at the commencement of the game.

Interestingly, four participants noted that a valuable aspect of ROC was that it allowed them to practice skills in a safe and non-threatening environment.

"the game allows you to investigate these scenarios without getting hurt"

"Using such a media makes it user friendly and non-threatening"

A couple of participants commented that having the game online made it an easily accessible and readily available source of information when needed.

An unusual comment made by four participants was that they found ROC to be a 'distraction' or 'procrastination tool'. For these participants, it appeared that ROC provided them with both the capacity to escape real life problems as well as dealing with them.

Negative aspects of ROC

Table 2 provides the themes derived from what the participants considered to be negative aspects of ROC.

Table 2.
'What did you like least about ROC?' (N=154)

Theme	Total (n)
Usability	56
• Technical (navigation, bugs, screen resolution, accessing website, logging in)	(33)
• Instructions/directions/objectives	(23)
Game play (storyline, short, response options, slow-paced, lack of locations/scenarios)	43
Downloading/updating	26
Nothing	19
Other	11
Aesthetics (graphics, gender)	9
Information	6
Unrealistic	6
Boring	4

The most common negative theme to arise from participants related to issues affecting the usability of the program. Usability was defined as problems that impact upon the participants' capacity to play the game in an acceptable manner. This theme can logically be broken down into two types of usability issues, technical and instructional. Technical issues primarily centered on bugs encountered within the game but also included problems with the screen resolution, navigation, difficulties accessing the website and logging into the game. Instructional issues centered on confusion arising from a lack of, or insufficiently detailed, directions and/or objectives to guide the participant through the game. This issue was particularly troublesome at game commencement.

Technical:

"I kept on getting stuck in the map and not being able to get out so I had to restart each time and eventually got quite annoyed and gave up."

"there were some instances where individuals were difficult to click on, particularly at the cafe."

"It didn't fit to my computer screen correctly and it wouldn't let me play at the start."

Instructional:

"it takes a while to get started - some more prompts or instructions at the start would be useful."

"for the first hour, I didn't know what to do. Mum wasn't in the house. I was just walking around the house clicking on things - that first hour turned me off quite badly."

"A clear objective from the very beginning would be helpful."

Issues relating to game play were the second most commonly arising theme. Responses falling in this category primarily focused on how short the game was and the obviousness of the response options. That is, they felt that it was too easy to select the 'right' response and therefore the game lacked adequate challenge. Also included in this theme was the feeling that the storylines were overly simplistic and slow-paced and that, ultimately, there was a lack of locations/scenarios to explore and engage in making the game somewhat repetitive. Participants also noted that there appeared to be no end point to the game or some of the challenges.

"it was boring after awhile; it would be better if there were more story lines, and it went for longer."

"Sometimes looking at the conversations you know the right answer which makes it harder to answer with a true reflection on your current feelings."

"should have more challenges – interact with other users perhaps? More complex scenarios."

"I wasn't sure if the game had ended? Eventually I just couldn't find anyone lol."

The amount of downloading required to play ROC was identified as problematic by 23 participants. Downloading presented a problem in two ways, the first related to the time required to download different components of the game which interrupted the fluidity of the playing process. The second related to the number of megabytes required to be downloaded which ate into internet quotas.

"it took too long to load stuff...I have limited internet at home to it made it tough to play it consistently."

"took a while to load. Eats up quota too, so I've only played it once"

The aesthetics of the game presented an annoyance for some participants, particularly in regards to gender.

"Also the bedroom is clearly a boy's and I'm a girl, would be good if we could create our own avatar or at least make the surroundings a bit more personal"

Some participants felt that the game was not very realistic or that they found it difficult to relate to the characters or storylines.

"A lot of talk about death through car crash first, couldn't really relate to it."

"Still don't relate to most of the characters."

"The fact that there are no tensions between family and social life as that is one of the most stressful parts of my life."

Conclusion

Therapeutic online gaming represents a new direction being taken to engage young people as a prevention or early intervention strategy with regards to mental health. Responses from the qualitative component of an evaluation of one specific online game, ROC, suggests that online games can be appropriately designed as a tool to deliver education that is both entertaining and engaging to a younger audience. Based on the data gathered from this study, some considerations for future developers of such programs include:

- *Keep up/downloads to a minimum.* This is particularly the case where the program is designed for home use.
- *Include ample customization.* This allows players to better connect with their character and the game generally, especially in first-player games. Incorporating customization has the additional benefit of giving the player a greater sense of control in the game.
- *Provide clear directions/objectives.* It is particularly important that the directions (especially in the initial stages of the game) clearly elucidate what the objectives of the program are, how to achieve them and how the player knows each one has been completed. This is especially important as a

younger audience will be won or lost in those first few minutes of game play, anything too complicated or confusing will likely be ineffective. Furthermore, clear completion of objectives will allow for a sense of accomplishment and provide positive reinforcement for the intended message.

- *Debugging*. It is of immense importance that the program has been tested as fully as possible before public release.

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