Engaging Teens in a Computer Based Weight Management Program: Avatars Could Help

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BACKGROUND

- The recommendation of intensive lifestyle modification (ILM) for all overweight children is a task unmet:
  - programs are expensive and
  - not widely available.
- Reinforcement is needed for long-term effects of short term programs.
- Computer-based interventions (CBI) have been shown to modify behaviors, as they can
  - tailor information,
  - are accessible and
  - are cost-effective.
- CBI impact relies on engagement and retention of users.
- Given the interest of teens in avatars from computer games, avatars may be a cost-effective addition to engage teens with CBI.
- There is a dearth of research on this issue.

OBJECTIVE

- Determine if overweight teens see a role for avatars in lifestyle management computer-based interventions.

METHODS

User-Centered Design methods were used in this study.

Phase 1: 8 focus groups of teens (12-17 years old) at an ILM summer camp to analyze the
- needs, barriers to change, desired social context for CBI and
- technical infrastructure for effective computer interaction.

Phase 2: design and prototyping of application screens and avatars based on
- Phase 1 results and
- 77 one-on-one usability assessments of prototypes, including avatar and contextual determinants of use.
- All qualitative data was taped, transcribed, coded, and reconciled until consensus was reached on identified themes.

RESULTS

Teens desired the inclusion avatars; they felt avatars could make CBI’s more fun and entertaining.

Avatars could:
- reinforce concepts from in-person programs
- serve as a coach, buddy, teacher, and motivator
- serve as surrogates for rewards (clothes, equipment or accessories).

Some teens want 2 avatars: 1 to represent themselves and another to serve as coach providing empathetic support.

Depicting predicted changes in the avatar’s shape and internal organs could help goal setting.

Roles of the avatar in applications:
- demonstrate cooking skills
- provide feedback on food choices
- demonstrate exercises or
- direct a game.

The desired avatar appearance varied from fantasy characters to realistic self-images.

Most desired avatar customization options to represent various races and cultures.

CONCLUSIONS

- Potentiating beneficial effects of clinically validated in-person ILM programs is essential.
- CBIs can be more efficient, accessible, convenient, and less costly and be scaled to meet the demands as we move from treatment to prevention of obesity.
- Avatars may have a beneficial role in engaging teens and retaining their interests in a CBI that is built on evidence-based principals of ILM.

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February 7, 2014

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RE: Engaging Teens in a Computer Based Weight Management Program: Avatars Could Help (Abstract #: 752961)

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ABSTRACT TITLE: Engaging Teens in a Computer Based Weight Management Program: Avatars Could Help

PRESENTING AUTHOR: Toree Malasanos

PUBLICATION NUMBER: 3807.180

SESSION**: 3807—Endocrinology & Diabetes

SESSION DATE & TIME: Monday, May 5, 2014, 4:15 pm- 7:30 pm

ROOM: Exhibit Hall C (Vancouver Convention Centre)

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