Creating Partnerships Through Play

Tyra M. Pendergrass, M.E.M.
Research Associate
Associate Director, play2PREVENT Lab at the Yale Center for Health & Learning Games
Yale University School of Medicine

Lynn E. Fiellin, M.D.
Associate Professor of Medicine and the Yale Child Study Center
Director, play2PREVENT Lab at the Yale Center for Health & Learning Games
Yale University School of Medicine
Disclosure

• Ms. Pendergrass does not have any actual or potential conflicts of interest in relation to this program to disclose.

• Dr. Fiellin is affiliated with KnackTime Interactive, a small commercial venture that focuses on the distribution of evidence-based videogames for risk reduction and prevention in youth and young adults. Dr. Fiellin and Yale extensively manage this relationship.
“Coming together is a beginning, staying together is progress, and working together is success.”

~Henry Ford
The Community Engagement “Machine”

- Site Coordinators
- Teens
- Site Coordinators
- Other Site Staff
- Parents
- Outside Community Partners
- play2PREVENT Team
The Game

PlayForward: Elm City Stories

Formative Work
- Interviews/Focus groups—inform content, artwork

Pre-Production
- Refinement of artwork and content
- Creating a game design document
- Behavioral theories and manual development

Production
- Continued feedback between teen focus groups <-> game developers

Randomized controlled trial to evaluate game
- Involvement of after-school programs, teens, and parents

Stakeholders’ Input
- Real world implementation
Background

- In 2009, young people (aged 13-29) accounted for 39% of reported new HIV infections in the U.S.
- Disparities exist among the rates of infection with African-Americans accounting for 65% of new infections in this age group.
- Only 7% of all adolescents have engaged in sexual activity prior to age 13.
- 11-14 year olds may be an optimal window of opportunity for primary HIV prevention.
Background

• 15 million play interactive videogames:
  • 63% of 11-14 year-olds play on a given day.
• Majority of teens, across racial and socioeconomic lines, play videogames.
• Emerging data suggest that videogames can be effective as interventions for health promotion and risk prevention.
An Interactive Video Game
For HIV Prevention in At-Risk Adolescents
Coming Together....
The play2PREVENT Lab at the Yale Center for Health and Learning Games

Science Side:
- Lynn Fiellin, MD
- Kimberly Hieftje, PhD
- Tyra Pendergrass, MEM
- Lindsay Duncan, PhD
- Cindy Crusto, PhD
- E. Jennifer Edelman, MD
- Deepa Camenga, MD
- Marjorie Rosenthal, MD
- Linda Mayes, MD
- David Fiellin, MD
- Peter Salovey, PhD
- Brian Forsyth, MD
- Gail Slap, MD
- M. Zachary Rosenthal, PhD
- Tamer Fakhouri, MD

Game Side:
- Ben Sawyer (Digitalmill)
- Alex Seropian (Industrial Toys)
- Schell Games
  - Jesse Schell (Founder, CMU)
  - Bonnie Bogovich (Audio Artist)
  - Derek Hetrick (Character Artist)
  - Heidi McDonald (Writer)
  - John Kolencheryl (Game Engineer)
  - Josh Hendryx (Background Artist)
  - Manoj Anand (Producer)
  - Patrick McKiernan (Art Manager)
  - Peter Kinney (Design Intern)
  - Rebecca Cordingley (UI Artist)
  - Reagan Heller (Art Director)
  - Rick Matchett (Tech Director)
  - Sabrina Haskell (Project Director)
  - Samantha Verlihay (UI Artist)
  - Noah Falstein (Google)

Play2Prevent
www.play2prevent.org
play2prevent@yale.edu

A Collaboration Between

Supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development grant: R01HD062080
• Established in 1943.
• In the Fair Haven section of New Haven.
• Program provides after-school and weekend programs.
• Over 900 youth aged 6 -18 years enrolled.
• Has a camp during the summer.
Focus Groups & Game Development

- Interviews/focus group discussions
  - Artwork: “Party Scene” Picture
  - “My life” Timeline
  - Poster Project (Message Framing)
  - Photo Feedback Project
“Party Scene” Picture
“My Life” Timeline

My Life

11
- graduation

15
- Job

16
- drivers license

17
- College
- business
- go out more often

18
- hair salon

19
- button ring

20
- help out my mom

21
Poster Project (Message Framing)
Photo Feedback Project
Pre-Production: Teens < -- > Game Developers Feedback

Artwork Feedback

- Art pieces brought to the teens for feedback to ensure authenticity.
- Suggestions for improvement incorporated into artwork.
Pre-Production: Character and Storyline Feedback

Clothes too kid like

Too old

Favorite

No to the baggy pants
We all have times when we have to make hard choices. Explore these stories and take charge of the future by changing poor decisions.

Get more Power and Sense skill stars to change your Elm City story.

In Elm City Stories, the more you change, the better life can turn out. When you have made a lot of changes press Fast Forward to see your future...
He just wants to talk to me...

He wants more time with me...

He wants to make out...

He wants to show me something...

He wants to tell me a secret...

Let’s go upstairs where it’s more private...

Sometimes people don’t always say what they mean. What do you think this person really wants here?
BRIAN
That rumor can't be true, I heard that was their first time EVER having sex. You can't get pregnant the first time you do it!
SABRINA

AT AGE 30...

MY HOUSE

TRAVEL

FAMILY

MY CAR

STACK SCENE

MY CAR

TRAVEL
Staying Together ....
Randomized Controlled Trial

- Specified Aims: To evaluate the game’s impact on: knowledge, attitudes, and intentions about engaging in risk behaviors and initiation of risk behaviors.
- Randomized to play either PlayForward or Control Games (Subway Surfer, Angry Birds, Dragonbox).
- Played twice weekly for a period of 6 weeks.
- Overall Aim: To better understand how best to use video game technology to foster positive health behaviors.
- Completed assessments at baseline, 3 weeks, 6 weeks, 3 months, 6 months, 12 months and 24 months.
The Sites & Site Coordinator

• Engaged sites in multiple ways
• Hosted informational sessions for staff, kids, and parents
• Allowed flexibility with recruitment strategies for each site
• Assigned same research staff to each site over the course
• Constant communication with site coordinator regarding logistics, check-ins
• Helped with follow-up
The Adolescent Participants

- Provided all study materials.
- Assigned each teen an iPad for the duration of the project.
- Emphasized that teens were an important part of the study.
- Allowed flexibility for each of the sites.
- Hosted Pizza Parties for follow-up assessments.
The Parents

• Held parent informational sessions during recruitment period at each site.
• Obtained signed consent forms from parents.
• Maintained contact with parents throughout the study (i.e. assessment reminder calls, attendance concerns, during pick-ups).
Working Together....
Stakeholders Paper

• Collecting stakeholder data on its acceptability and real-life implementation strategies is critical for successful dissemination.

• Conducted 40 semi-structured interviews: 11 adolescents, eight parents/guardians, 13 after-school/school coordinators, and 14 community partners.


Stakeholders Paper (Adolescents)

• Liked the game.
• Reported that it taught them content they were not exposed to and in a manner they were more comfortable with.
• Gave them a better sense of decision-making.
• Liked it more than a traditional class because it was more engaging and afforded more privacy.

“The game taught me some stuff I didn’t know. I never knew the first time having sex with a girl could get pregnant. I thought it was like the first time you have sex, you’re okay.” (Male, Hispanic, 12 years old)

“It’s more entertaining. Teenagers don’t want to just stand there and get lectured all of the time. They want to have something that they can interact with that’s more fun.” (Male, African American, 13 years old)
That actually has not been a topic. Unless they’re going to do something later on. Maybe their assumption is that they’ve already had health education in their elementary in middle school years and they don’t.” (Female, African American)

Expressed lack of adolescents’ exposure to this content.

Stated they would like to play the game to enhance discussions with their children.

“We all need help. We all need reinforcement. so, yeah, that would be a tool for us, too.” (Female, African American)
Stakeholders Paper
(After-School/School Coordinators)

• Recognized the need for teaching these topics.

“It presents life skills and responsibility. When it comes to drugs and alcohol, and sex it’s a huge responsibility. These kids need to be educated, and the visual is best.” (Male, Hispanic)

• Viewed this intervention as an innovative method they wanted to use.

• Highlighted tools to help with implementation.
“As a school social worker we’re always looking for resources to help hone in on the skills that we’re trying to teach. Just kind of making it real for them because we talk about it in an office, but they don’t have any opportunity to practice that or see where that decision would take them.” (Female, African-American)
Summary: The Value of Community Partnerships

• Community engagement and partnership formation have been an essential part of this project from beginning to end.
• Strong partnerships have helped to aid in the development of the game and retention for RCT.
• Partners excited about upcoming projects.
• BE FLEXIBLE!!!
Preliminary Findings

- Teens played an average of 10 hours over 10 sessions
- There were statistically significant differences in outcomes related to attitudes and knowledge over the 12-month study period
- Interviews with *PlayForward* players after 6 weeks:
  - 66% talked with friends about the game
  - 85-90% liked the way the game looked
  - 75-80% enjoyed playing the game and thought it was challenging
  - 89% reported that they felt responsible for the choices they made in the game
  - 78% reported that they would make decisions in real life as they had made them in the game
Next Steps

• **Real world implementation**

• **Access:**
  - Translated game to Android tablets, Mac, PC.
  - Also translated to Google Chromebook.
  - With proposed NIH funding, will translate to Web-based.

• **Partnerships:**
  - New Haven: The Escape Center; NH Public Schools.
  - Boston: Boston Public Schools.
  - Peer Health Exchange; KIPP Programs.
  - International collaborations?
Questions?