Mobile Fitness Games

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Possibilities for Mobile Fitness

- We carry mini-computers with us everywhere we go
- Phones have the capability to record our movements and track our progress
- The micro-recording of mobile phones can help people live healthier lives and recognize/change unhealthy habits
- Fitness games create an interactive platform for users to become extrinsically motivated by the game to continue working towards their fitness goals
- Relatively new sphere
- Mobile fitness trackers versus mobile fitness games
Mobile Fitness Trackers

- Allows you to input and/or monitor your workout
- Stores your fitness information
- Recommends workout strategies/plans; explains how to use certain machines in the gym
- Gives you feedback and displays interactive statistics
- Utilizes intrinsic motivation and sometimes social interaction to motivate user progress
- An overwhelming majority of mobile apps on the market right now are fitness trackers, however, these are not games.
What does a Fitness Game need?

- Realistically, users won’t be able to play the game for more than 30 to 60 minutes per session
  - Game length needs to be roughly equivalent to average workout
  - Game play time can be extended by combining it with actions that a user will have to do before or after the active portion of the game.
- Arcade and strategy games combined with story telling will probably be the most effective
  - Don’t want the situation where someone plays a game for a week and stops
- Should be able to play it multiple times (or game should never have a definite end)
  - Users shouldn’t stop exercising just because they reached the end
- Awesome games current exist for consoles but have yet to effectively transition to mobile
  - Dance Dance Revolution, Zumba Fitness, Dance Central
  - Consoles: Wii, Playstation 3, Xbox 360
- Next: Examine through different fitness/(semi) active games currently on the market
“Take a Break in the Office” Games
(i.e. motivation to continue playing disappears after 15-20 minutes)

- **Bit Breaker** via Camera
  - Your stereotypical game where you have a bar and ball and you need to break all the blocks.
  - Move the bar by physically moving and release the ball by jumping.

- **FitQuest Lite** via Accelerometer
  - You are a lost baby squirrel that is trying to find its way home
  - Jog to make the squirrel move, jump over logs, duck from eagles

- **Ball Strike** via Camera
  - Use your arms and legs to hit as many balls as possible and accumulate points
  - There is a level progression where different colored balloons are added
“Scaring You Into Moving” Games

- **Zombie, Run!** via Accelerometer/GPS
  - Go on missions and run from zombies. Structured fitness training
  - Includes after-fitness game play where you build up township

- **Missile War** via GPS
  - People can send virtual missiles to you; phone will alarm when they are coming towards you and have 60 seconds to run away from that location
  - Only sustains short bursts of physical activity

- **SpecTrek** via GPS
  - Walk/run around your neighborhood finding and catching ghosts
  - When you put your camera phone up to that area, there will be a ghost in that view. Tap screen to catch the ghost.
  - Can choose duration of level (30 min, 45 min, 2 hours)

- **Slap that Zombie** via Camera
  - Zombies are coming to eat your brain and you need to slap them
Problems with these Games

- Most don’t motivate extended physical activity
- Undirected fitness plan
  - Although moving around is definitely good, none of these games will help you become more fit because they lack fitness structure
- Feedback issues; technology is still emerging
  - Leads to frustration when movements are not recognized
- Graphics are too basic
- Lack of goal/mission within the game
- GPS issues
Blue Goji

- Goal is to make cardio fitness more fun
- Wearables: two controllers (that strap onto any cardio equipment) and movement tracker (strap onto pants or shoes)
- 25 different mini-games to play
- The faster you move the more points you get
  - This is not an effective fitness strategy
- Games are really fun
- Monitors your fitness but you will have to create your own workouts
Blue Goji Video

https://www.youtube.com/watch?v=gq0xYMjA_24
My Recommendations to Create the Best Fitness Game!

- Create a storyline/plot that keeps users involved
- Make a game that requires activity to accomplish tasks but also contains stationary game play
- Structured fitness training that is formulated to help user accomplish his/her goals
- Level progressions and game evolution
- Length of time of physical activity
- Accurately monitor fitness levels non-stop
  - Walking rates can be used to unlock something, etc.
- Interactive and clean user design
- Wearables: mostly unexplored terrain but great fitness game doesn’t necessarily have to be through phone - can link phone and wearable
- Monitor fitness progression
Thank you!