



# Our World

AN INTERACTIVE WAY TO LEARN ABOUT  
THE SOCIAL DETERMINANTS OF HEALTH

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# Introduction

- ▶ Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age etc. (Health People 2020)
- ▶ Very limited research on interactive ways to educate individuals on SDH.
  - ▶ However HBO “The Wire” is an innovative and effective teaching tool for teaching health disparities and engaging the next generation of public health educators (Tettey, 2018).
  - ▶ George Washington University developed a field trip titled “See the City You Serve” as a education strategy for teaching SDH (Chang, Bass, Duwell, Berger, Bangalore et al, 2017).
  - ▶ Health Disparities is an issue that more individuals in the U.S. need to understand. Because of this belief, we wanted to develop a fun and interactive way to educate students on SDH.
- ▶ **What are some interactive ways to teach SDH at a small liberal arts college or university?**

# Methods

- **Participants**

- 32 undergraduate students at Otterbein University
  - Students from a Senior Year Experience (SYE) Health Equity course
  - Students from a Public Health and Society course
  - Invited the general undergraduate student population to participate in an INST and FYE sponsored event.

# Methods (Cont.)

## ► Procedure

# START

Housing  
and  
Marriage

Because you live in an unsafe house, maintenance is paramount. Spend \$5000\*

Your friend paid you back \$5,000 from the loan you gave them.

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You have received a raise! Collect \$2,000 extra every payday

PAY TAXES

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# \$

Your doctor diagnosed you with cancer. Pay \$20K for treatment. If you don't have insurance your treatment is too late and you will die in two turns.

If married, get a divorce and pay \$1K/child/pay-day

You have been diagnosed with a mental disease. Pay \$2000 to receive help, regardless of health insurance

Lost your job find a new one skip one pay day

Congratulations, a girl is born! Collect \$1,000 from each player

# \$

PAY TAXES

You got in an accident on your way to work. Pay \$5,000 for damages\*

# End

Did You Know???

Of the 30 million+ individuals uninsured, over half (55%) are minorities?



# Methods (Cont.)

## ▶ Instrument

### ▶ Pre & Post Surveys

- ▶ Included questions using a 5-point Likert scale in relation to overall game experience (strongly disagree to strongly agree).
- ▶ Semantic differential anchors to assess overall attitudes of the game
- ▶ Open-ended questions

# Methods (Cont.)

- ▶ **Data Analysis**

- ▶ Used SPSS (v.22)

- ▶ Descriptive Statistics

- ▶ Means, Standard Deviations, Percentages, Frequency

- ▶ Inferential Statistics

- ▶ Paired Samples t-Test

# Results

## ➤ Demographics

- Over half of the participants were Caucasian (65.6%) and 28.1% were African American
- A mean age of 21.2 years old
- Of the 32 participants, 28 were female

# Results (Cont.)

## ▶ Overall Game Experience

- ▶ 31 out of 32 participants either agree or strongly agree that this education tool is a way to educate someone about the SDH.
- ▶ Overall game experience 96.9% agreed or strongly agreed that they enjoyed the game.
- ▶ Over half of the participants agreed to play this game again in the future.
- ▶ 18 participants (57.5%) agreed that they would recommend this game to others.
- ▶ 23 participants (71.8%) believed every student should play this game before they graduate college.

## Results (Cont.)

- ▶ 23 participants (71.8%) were either satisfied or very satisfied with the *overall game quality*.
- ▶ 28 participants (87.5%) were either satisfied or very satisfied with the *game value*.
- ▶ 26 participants (81.3%) were either satisfied or very satisfied with the *game experience*.
- ▶ 19 participants (59.4%) were satisfied or very satisfied with the *length of the game*

# Results – Paired Samples T-Test

<b>Semantic Differential Anchors</b>	<b>t</b>	<b>df</b>	<b>p-value</b>
a waste of time <-> not a waste of time	-3.661	29	0.001
worthless <-> valuable	-3.478	31	0.002
unimportant <-> important	-2.710	31	0.011
boring <-> stimulating	-3.900	29	0.001
fantasy <-> reality	-2.842	31	0.008
unexciting <-> exciting	-4.910	31	0.000

powerful <-> powerless  
cutting edge <-> traditional  
easy <-> difficult  
unfair <-> fair

# Student Feedback of Our World

I enjoyed the various scenarios of the game. I think it allowed game members to get a touch of reality.

I think the game is a very good idea. It teaches the players about privilege in this country and allows them to experience someone else's harsh reality.

The scenarios were very realistic and things happened to you like in real life.



I enjoyed the real life feel of the game.

# Discussion

- ▶ *Our World* was a success and participants enjoyed playing the game
- ▶ However, we found some issues:
  - ▶ In the beginning of the game instructions were not as clear to participants
  - ▶ Issues with score card and calculations throughout the game
  - ▶ Some participants did not get the full effect of the game
  - ▶ Game play should be limited to 4-5 individuals at one time
  - ▶ The length of the game

# Conclusions/Future Research

- ▶ *Our World* was a success
- ▶ However, we need to take this to the next level
  - ▶ Update the board
  - ▶ Assess the presentation along with game play
  - ▶ What did they truly learn from this experience?
  - ▶ Representation of participants from all backgrounds and non health-related majors
  - ▶ Diversity and Inclusion seminars

# Reference

- ▶ Chang, A. Y., Bass, T. L., Duwell, M., Berger, J. S., Bangalore, R., Lee, N. S., Amdur, R. L., Andrews, M., Fahnestock, E., Kahsay, L., ... El-Bayoumi, J. (2017). The Impact of "See the City You Serve" Field Trip: An Educational Tool for Teaching Social Determinants of Health. *Journal of graduate medical education*, 9(1), 118-122.
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