

The Immersive Virtual Environment Testing Area

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Community
Translation



Clinical
Translation



Health
Disparities

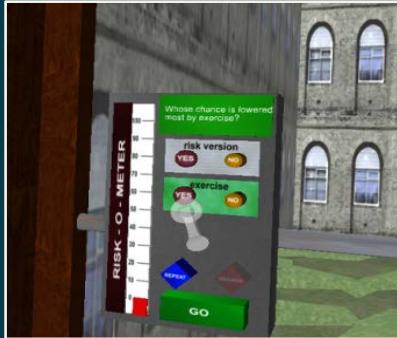


Big Data



National Human Genome
Research Institute

Immersive Virtual Environment Testing Area



Why Use VR For Research (and Practice)?

- Reduces usual tradeoff between control and realism
- Allows simulation of complex or impossible scenarios
- Enhanced behavioral measurement opportunities
- Portable, distributable



Example: Healthcare Communication Research



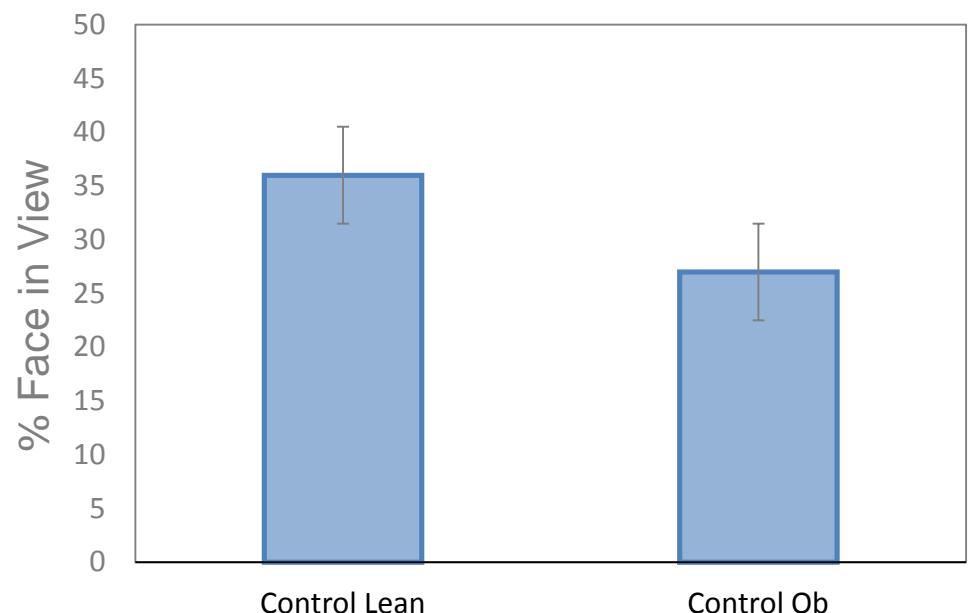
How does a patient's weight influence physician trainees' treatment of that patient and decisions made for her care?

- Two versions of Jennifer Taylor
 - Identical except for weight status
 - Controlled interaction in a psychologically/visually realistic environment

Results: Behavioral Measurement



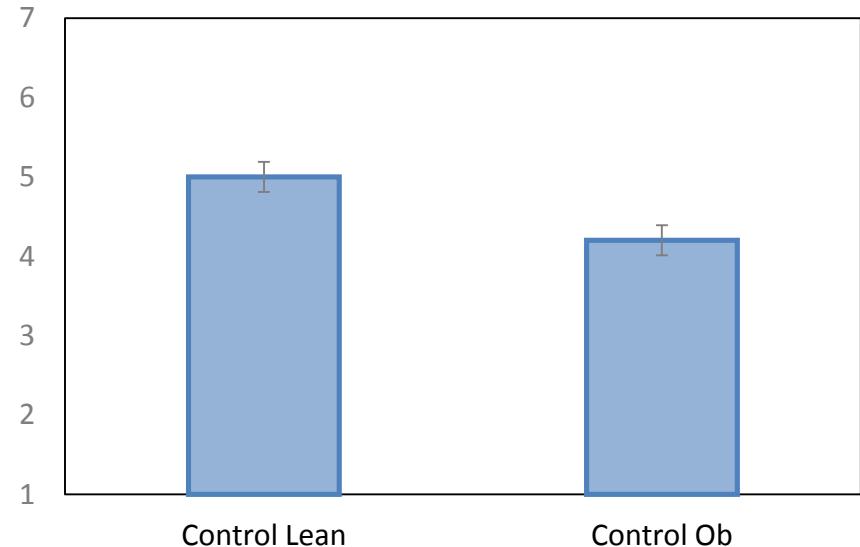
Visual Contact Behavior



Results: Attitudes about Patient

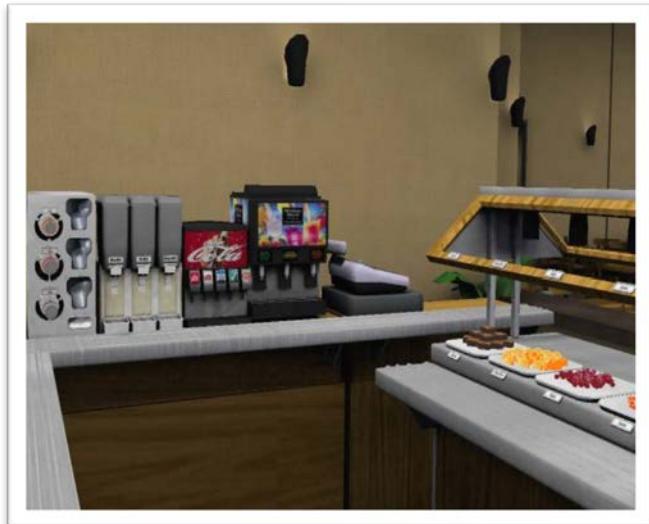


Anticipated Adherence

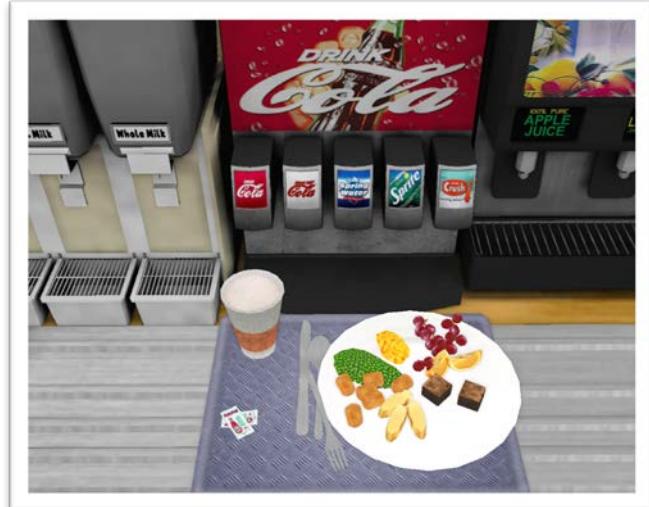


- Results suggest that patient weight status, isolated from all other variables, elicits biased behavior and attitudes from physician-trainees
- Moving beyond research to apply controlled/realistic VR interactions for training evaluation (ex: pharmacogenetics training among NPs)

Example: Health Behavior Research



How does family history-based obesity risk info for child influence parent feeding behavior?

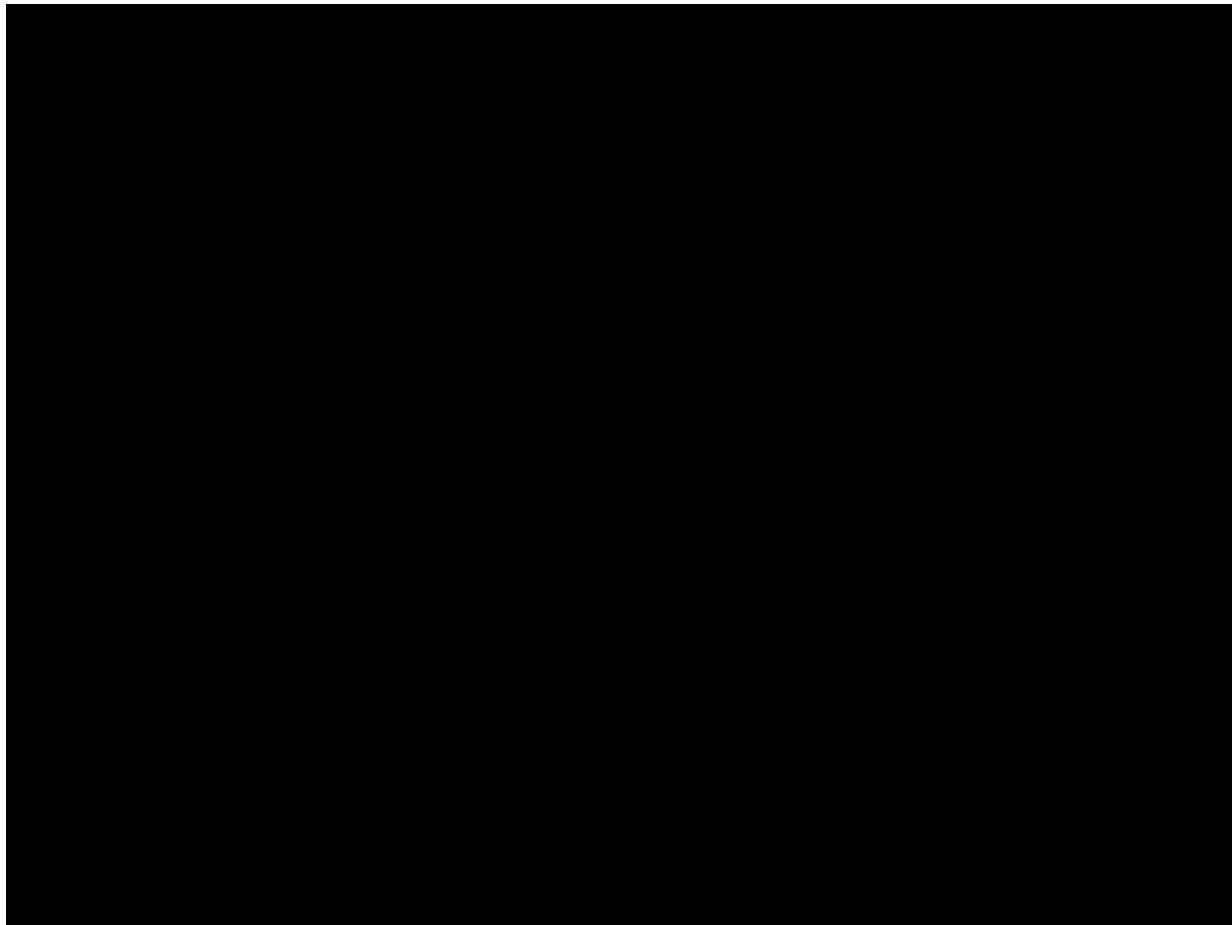


- Does this risk information cause parental guilt?
 - Can guilt be reduced through child feeding behavior?

The VR Buffet

- Controlled yet psychologically-realistic research setting
- Expanded behavioral measurement opportunities

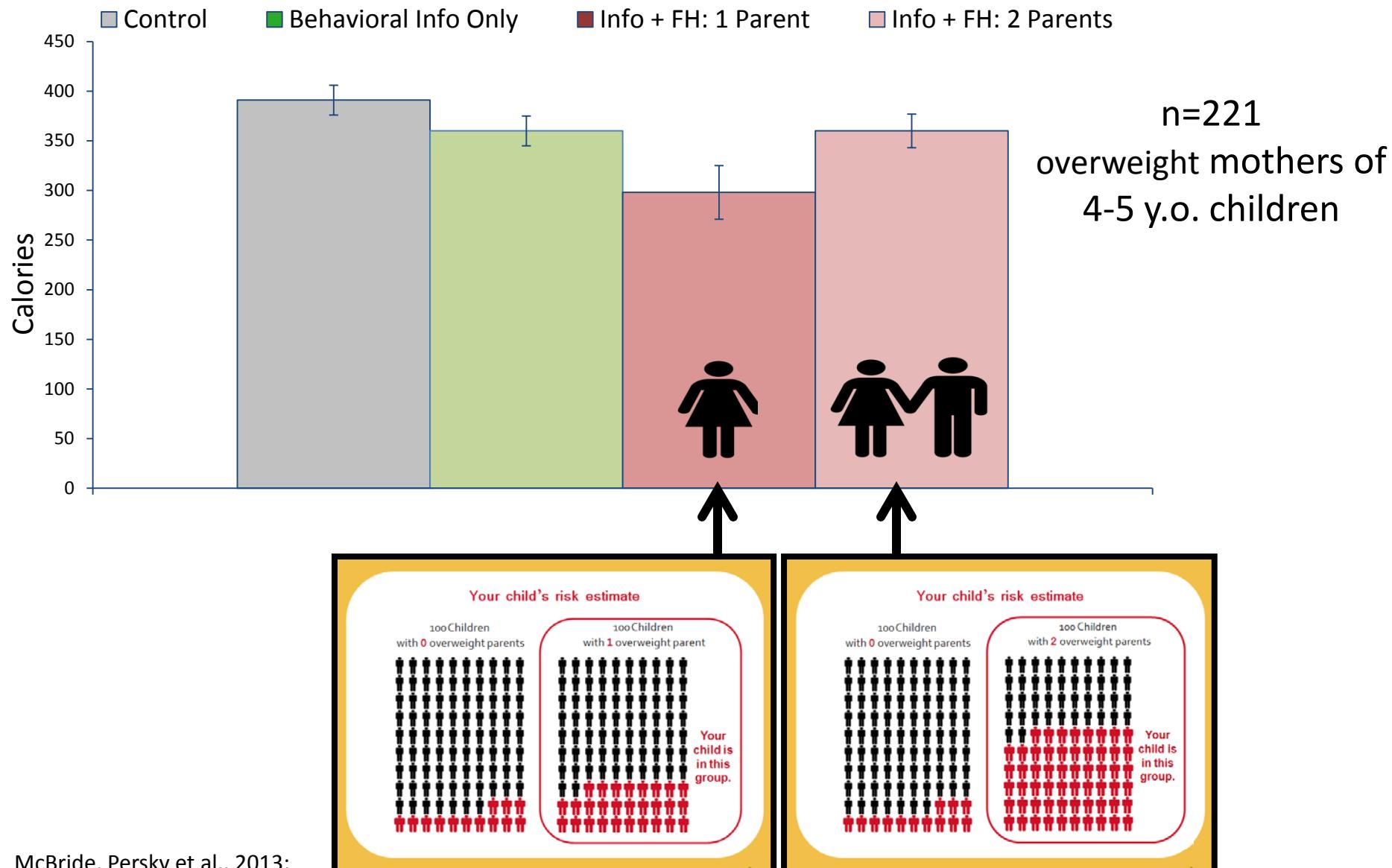




Validation

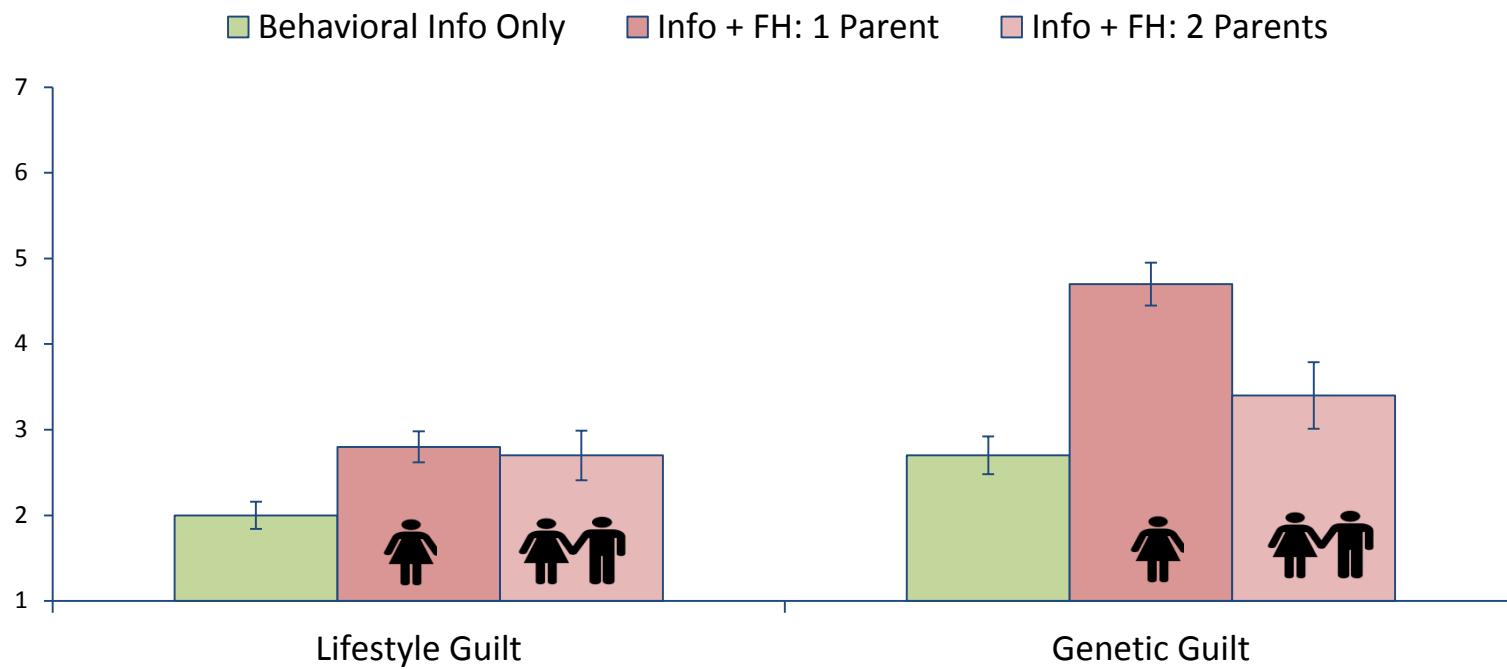


Feeding Behavior in the VR Buffet



Mothers' Guilt

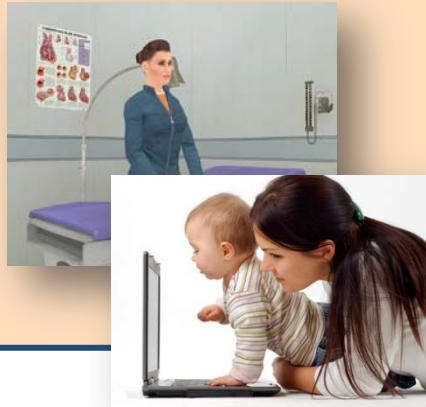
Guilt experiences



Making healthier food choices was associated with lower levels of *both types of guilt*.

Summary

Research



- Determine influence of key factors in shaping response to health messages
- In a setting with experimental control, but also psychological realism associated with practice settings and an expanded array of behavioral measures

Training and Practice



- Generate strategies to communicate and apply health information in practice settings
- Generate VR tools to transition to practice settings

Acknowledgements

Project 1

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Project 2

Health Behavior



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