From Gameplay to Reality

—A case study of the Elm City

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Data Validity & Gameplay Analysis



Those who made wrong choices in minigames took 25% longer



Players were confused and making efforts to make decisions



Players paid attention to the game! Data is valid for further analysis



Scored **15.7% better** in HIV-related questions than common issues like unprotected sex

Lower accuracy (<69%) for alcohol-related questions

Score Across 2 Minigames



When better knowing the consequences, teenagers are **more likely to refuse** improper proposals



More scenarios about common problems (underaged drinking/drug usage) can be included to better cater to students' needs

Minigames and Real-life Choices

• For the **same amount of reward** in Priority Minigame, players made different choices about the following issues:

Corresponding Real-life Choices

Gameplay Choices



11.2% choose to try drugs to see how it feels



42.9% choose to get paid to deliver drugs to someone at school



8.7% 8th-graders have used illicit drugs in the last month



6.25% choose to buy alcohol and get drunk



18.6% choose to have underage drinking after homecoming dance



36.2% choose to hook up with someone met at a party



91.8% choose to have unprotected sex



3% 8th-graders reported binge drinking over the past two weeks



16% middle schoolers reported drinking alcohol over the last month

22% 8th-graders reported having had casual sexual intercourse



45.7% middle schoolers reported unprotected sexual intercourse

Real-life Choices vs. Gameplay Choices





Players' decisions are highly correlated with teenagers' reallife choices.

The data can potentially be used by researchers to predict potential risky behavior.

Sources: National Center for Drug Abuse Statistics; Centers for Disease Control and Prevention National Research Council, Institute of Medicine, Board on Children, Youth, and Families, Committee on the Science of Adolescence