CENTRE for GAMBLING RESEARCH at UBC

Session: Understanding Emerging Forms of Gambling

2. Migration from loot box use to conventional gambling in a sample of BC video gamers

Lucas Palmer

Purpose of the current study

1. Replicate the longitudinal associations in regional sample in BC

2. Test the role of randomness/uncertainty of rewards in the link between gaming and gambling

1. Why Replication?

Confirms of the validity of prior observations

- Raises confidence that a particular claim is true

Allows for the testing of generalizability

- How well does the observation hold up across different populations?
- Testing a claim in a specific region
    - e.g. heightened public interest in British Columbia, regional data useful for regulation/recommendations

B.C. completes year-long assessment of video gamers to assess possible correlation with gambling addiction

FRANCES BULA >

VANCOUVER

SPECIAL TO THE GLOBE AND MAIL

PUBLISHED DECEMBER 20, 2019

British Columbia

Richmond addiction group raises concern over 'loot boxes' in video games

Gaming industry spokesperson disputes idea that the randomized power-ups are a form of gambling

CENTRE for
GAMBLING RESEARCH
at UBC

2. Role of randomized rewards; loot boxes vs. direct purchase microtransactions

- **Direct purchase microtransaction (DPM)**
  - Purchase items directly with in game or real currency

DPM   Loot Box

Hypothesis:

Loot box spending at baseline will predict migration to gambling at a six-month follow up..
        AND
this effect will be greater than any predictive link between DPM spending and the initiation of gambling. .

METHODS

Participant sampling

- Crowdsourced community sample advertised on Reddit and University of British Columbia

Inclusion Criteria:
- Between the ages of 19-25
- Resident of British Columbia
- Played video games for at least 3 hours weekly

Procedure/Questions

Pre-Screen

Baseline Survey (T1)

Six-Month Follow-up (T2)

Brief eligibility check:
- Age?
- Country and Province of residence?
- Do you currently play video games, if so how often (hrs/week)?
- Are you familiar with loot boxes; direct purchase microtransactions?

Procedure/Questions

Pre-Screen

Immediately following pre-screen

Baseline Survey (T2)

Six-Month Follow-up (T2)

Main questions…
- Please estimate your spending on **Direct Purchase Microtransactions** over the past *twelve months* in CAD
- Please estimate your spending on **Loot Boxes or Keys to open Loot Boxes** over the past *twelve months* in CAD
- Do you currently gamble (yes/no)?

Procedure/Questions

Pre-Screen

Baseline Survey (T1)

Six months following baseline

Follow-up Survey (T2)

Main Questions…
- Do you currently gamble (yes/no)?
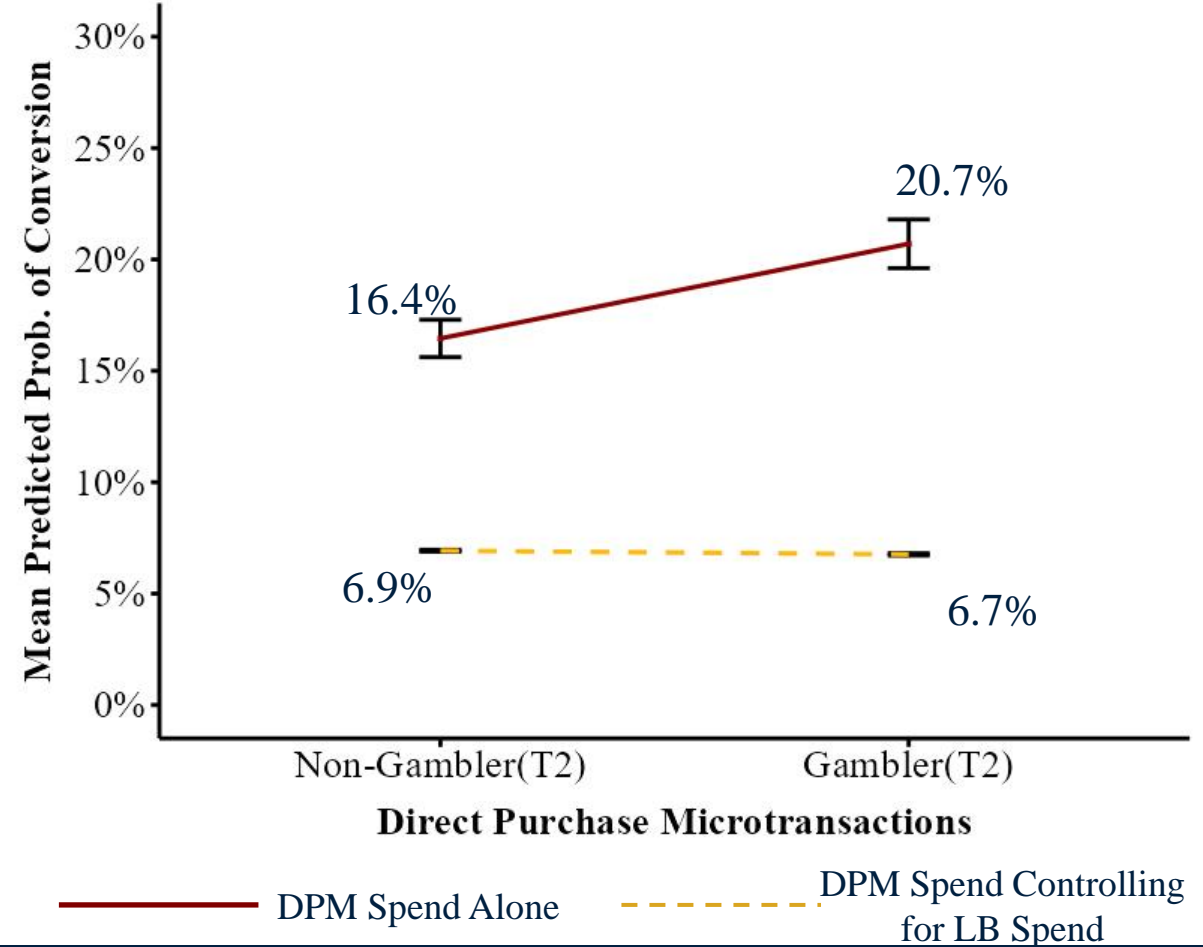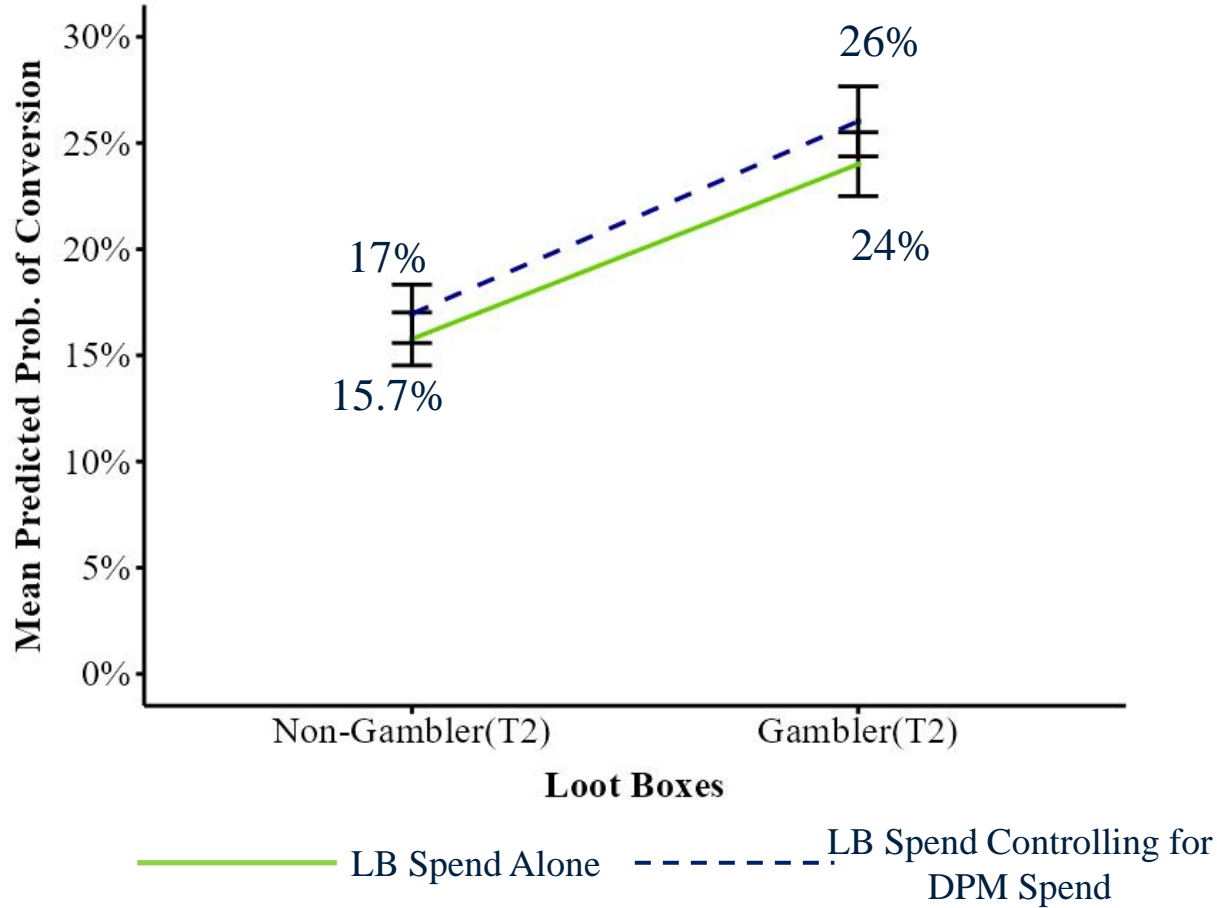- Please estimate your spending on Gambling Activities **over the past six months** in CAD

Results

Descriptives (Baseline)

	Non-Gamblers	Gamblers
N at Baseline	113	109
N at follow-up	64 (57%)*	45 (41%)*
Age	21.7	22.4
Gender	73.4% men	73.3% men
Age started gaming	9.66	14.3
Gaming hours / week	16-20 hrs	11-15 hrs
Familiar with loot boxes	95.3%	84.4%
Purchased a loot box	71.0%	84.4%
Sold an item from loot box	60%	80%
12 m spend on loot boxes (mean)	CAD$326.11	CAD$1076 *
12 m spend on loot boxes (median)	CAD$20	CAD$400 *

Attrition rate was much higher in BC sample; likely due to sampling from Reddit vs Prolific

Loot box spending is much higher in BC sample

Predicting T2 migration to current gambler status

Left chart — Loot Boxes:
- Non-Gambler(T2): 17% (LB Spend Controlling for DPM Spend), 15.7% (LB Spend Alone)
- Gambler(T2): 26% (LB Spend Controlling for DPM Spend), 24% (LB Spend Alone)
- Y-axis: Mean Predicted Prob. of Conversion
- Legend: LB Spend Alone; LB Spend Controlling for DPM Spend

Right chart — Direct Purchase Microtransactions:
- Non-Gambler(T2): 16.4% (DPM Spend Alone), 6.9% (DPM Spend Controlling for LB Spend)
- Gambler(T2): 20.7% (DPM Spend Alone), 6.7% (DPM Spend Controlling for LB Spend)
- Y-axis: Mean Predicted Prob. of Conversion
- Legend: DPM Spend Alone; DPM Spend Controlling for LB Spend

Sample: Non-Gamblers (T1)

CENTRE for GAMBLING RESEARCH at UBC

Summary/Conclusion

- Study provides additional evidence that greater loot box spending predicts future gambling, in a regional sample based in BC.
    - Greater loot box spending significantly predicted gambling initiation over and above DPM spending

- Looking forward…
    - Randomness/uncertainty of reward as the psychological crux linking video gaming to the initiation of gambling
    - Reverse pathway (gambling -> loot box spending)?
        - Could not test this association here due to lack of non-LB users at T1
        - Possible there is an underlying trait which leads people to prefer random rewards