



Are Loss Limits and Pre-commitment Strategies Effective Prevention Measures for At-Risk Gamblers?

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Motivation to Gamble

- Problem gamblers are particularly motivated by the **desire to win money** (Ladouceur, et al., 2002; Neighbors, et al., 2002; Wood, et al., 2004).
- Motivated by the belief that gambling is **an income-generating activity** rather than a form of entertainment (Walker, 1992).





At issue...

1. Misunderstanding of how EGMs work:

- **Persistence in the face of loss** (e.g., Sévigny & Ladouceur, 2004; Walker, 1992; Wohl et al., 2010)

2. Erroneous cognitions

- **Over-estimating the likelihood of winning and, in turn, to excessive spending** (Gaboury & Ladouceur, 1989; Manoso, et al., 2004; Wohl & Enzle, 2002, 2003)



The need...

Promoting micro-level Responsible gambling:
Behaviour whereby the gambler

1. Views gambling as **entertainment** with associated costs
2. Sets a **limit** for the time and money spent and sticks to it



The need cont...

Macro-level responsible gambling: Occurs through the collective actions and shared responsibility among **all stake holders**

Government, Gaming Operators, Regulators, Treatment Providers, Community Groups and Individual Gamblers.



Unanswered Questions

OLG, OPGRC, CUGL: Responsible play and pre-commitment strategies

- What are the best ways to effectively **educate**?
- How to heighten willingness to set pre-session limits?
- What tools can facilitate adherence?
- Are Loss Limits and Pre-commitment Strategies Effective Prevention Measures for At-Risk Gamblers?



The Slot Machine: What Every Player Needs to Know



Produced by: Michael Wohl, OLG, and OPGRC

<http://www.youtube.com/watch?v=RRlqfAitaoQ>



Methodology

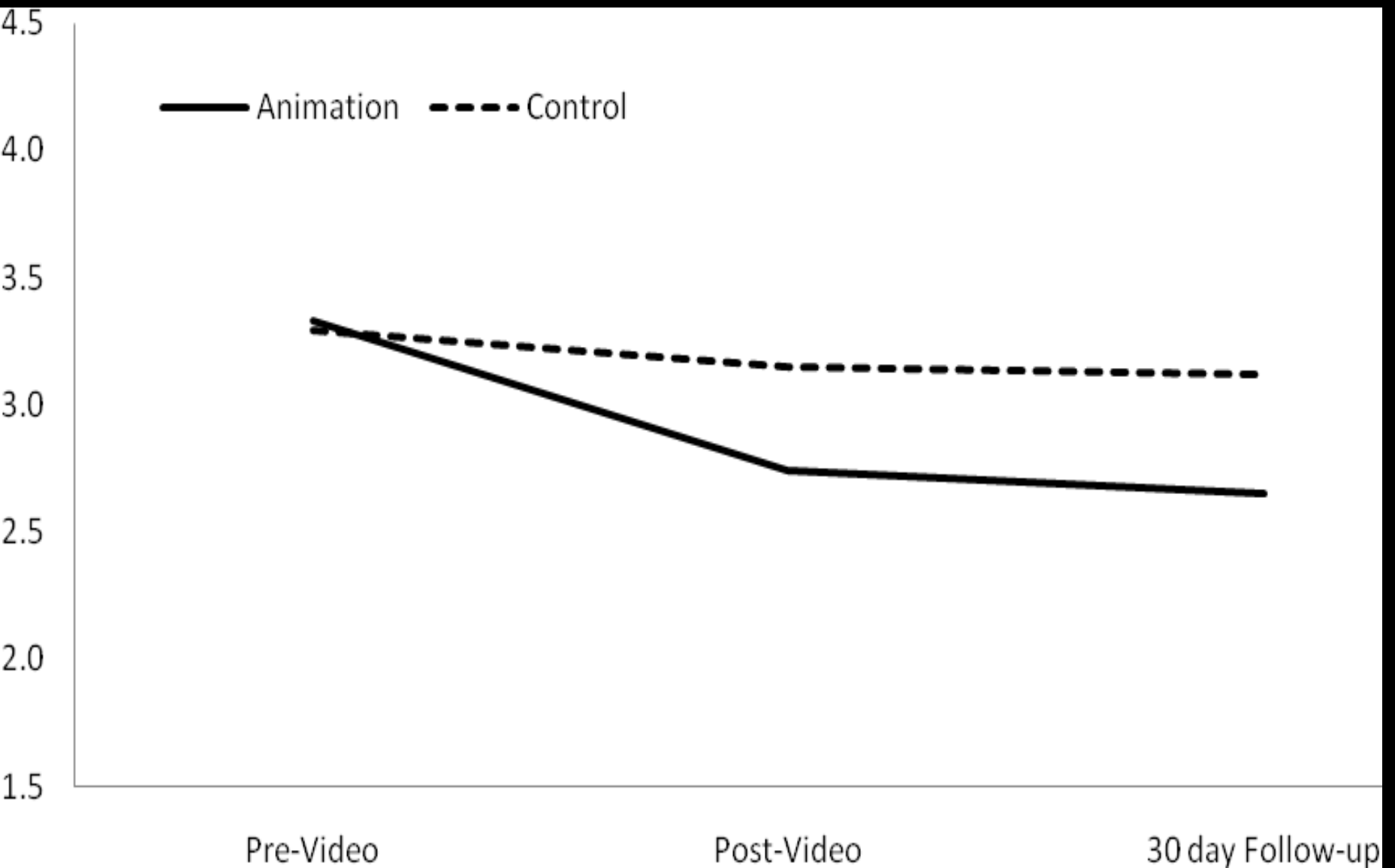
Participants. 140 recreational gamblers (68 males, 70 females, 2 unspecified) from the Ottawa-Carleton Area.
- Age ranged from 19 to 84 ($M = 46.79$; $SD = 16.27$).

Location. Rideau-Carleton Raceway

Procedure. Animation-based educational video on slot machines ($n=87$) vs. Video about casinos in Ontario ($n=53$).

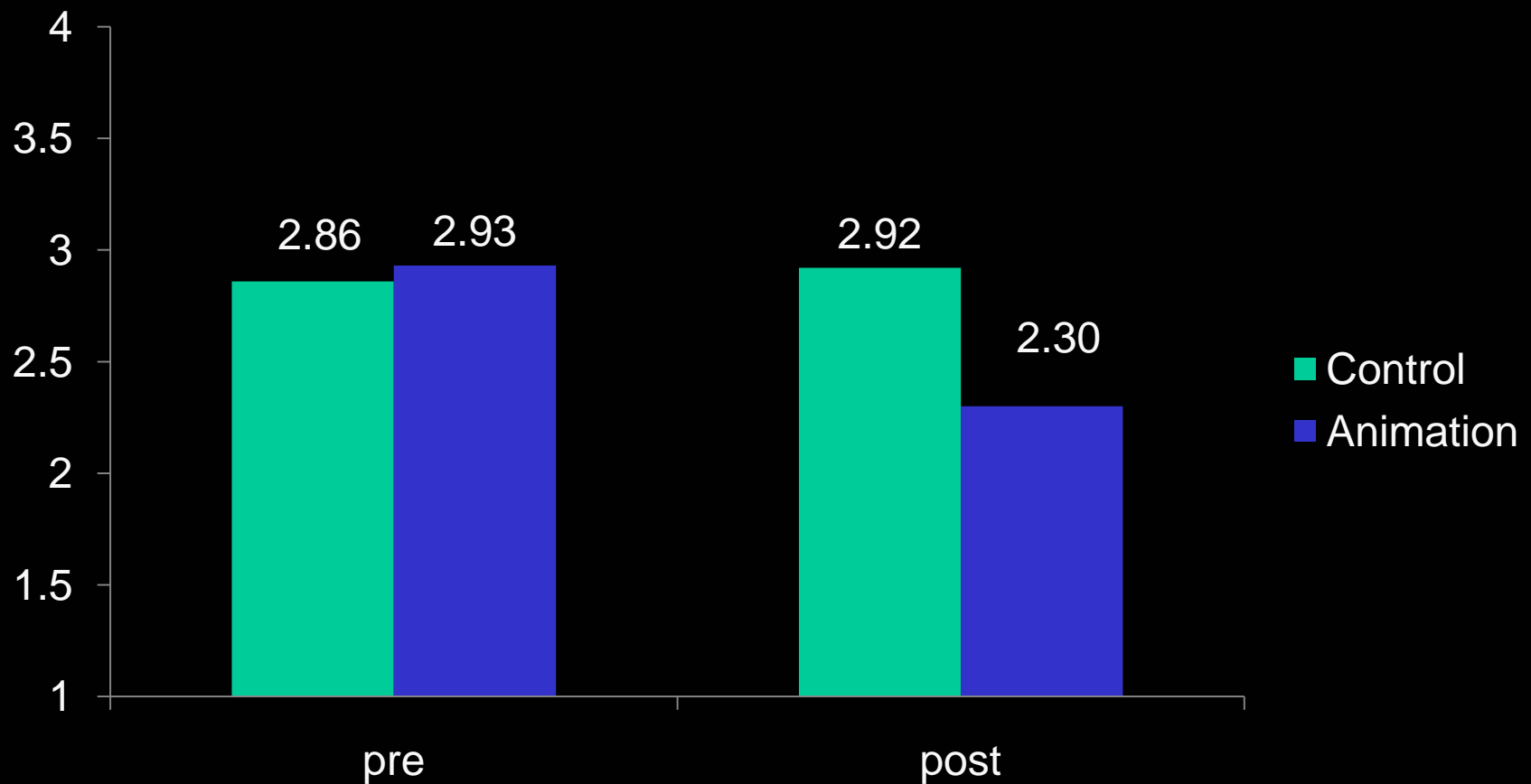
Measures. Administered pre- and post stimulus, 24 hour follow-up, 30 days later.

Erroneous cognitions as a function of condition and time of assessment





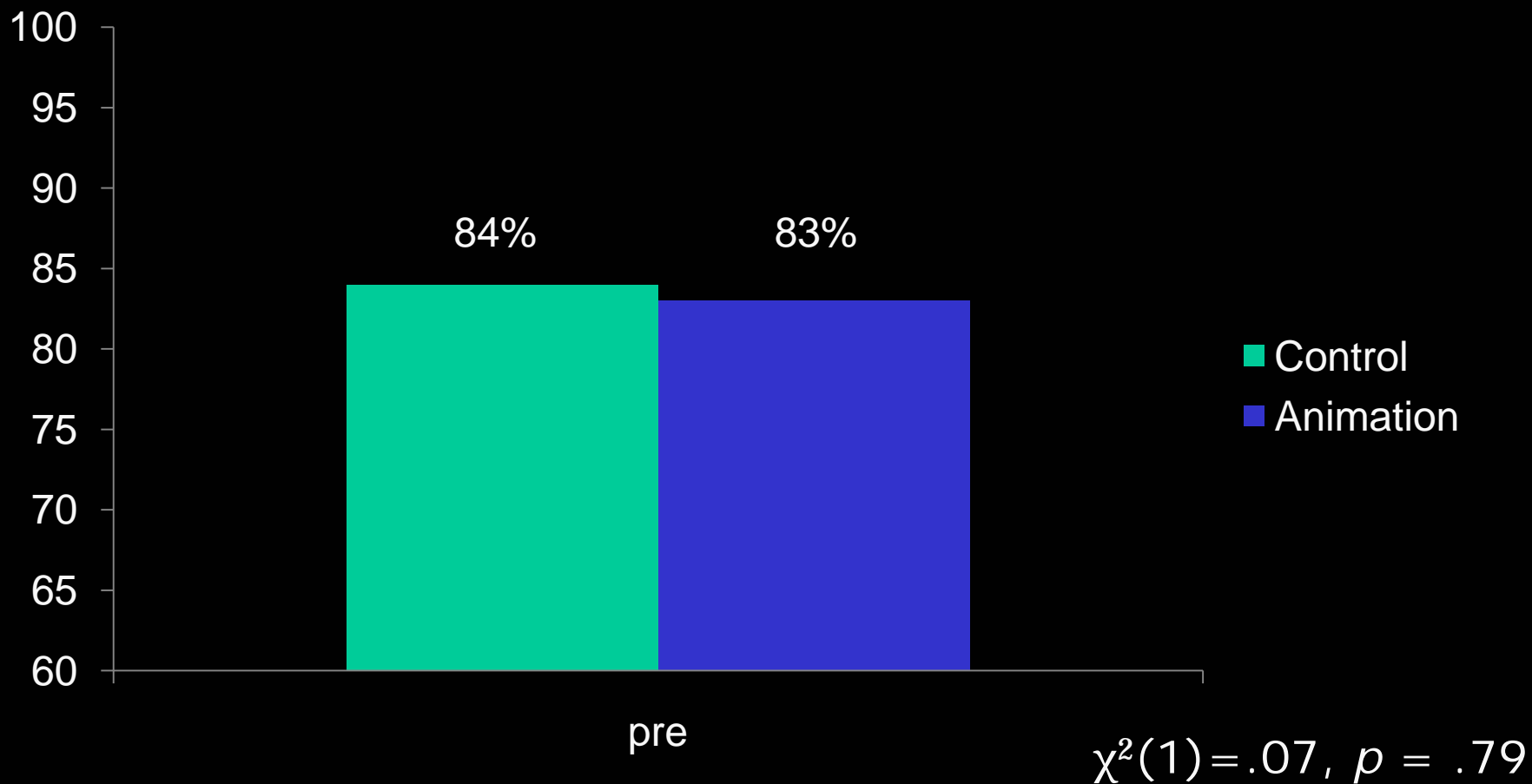
Does persistence pay off?



$F(1, 134) = 8.32, p = .005$

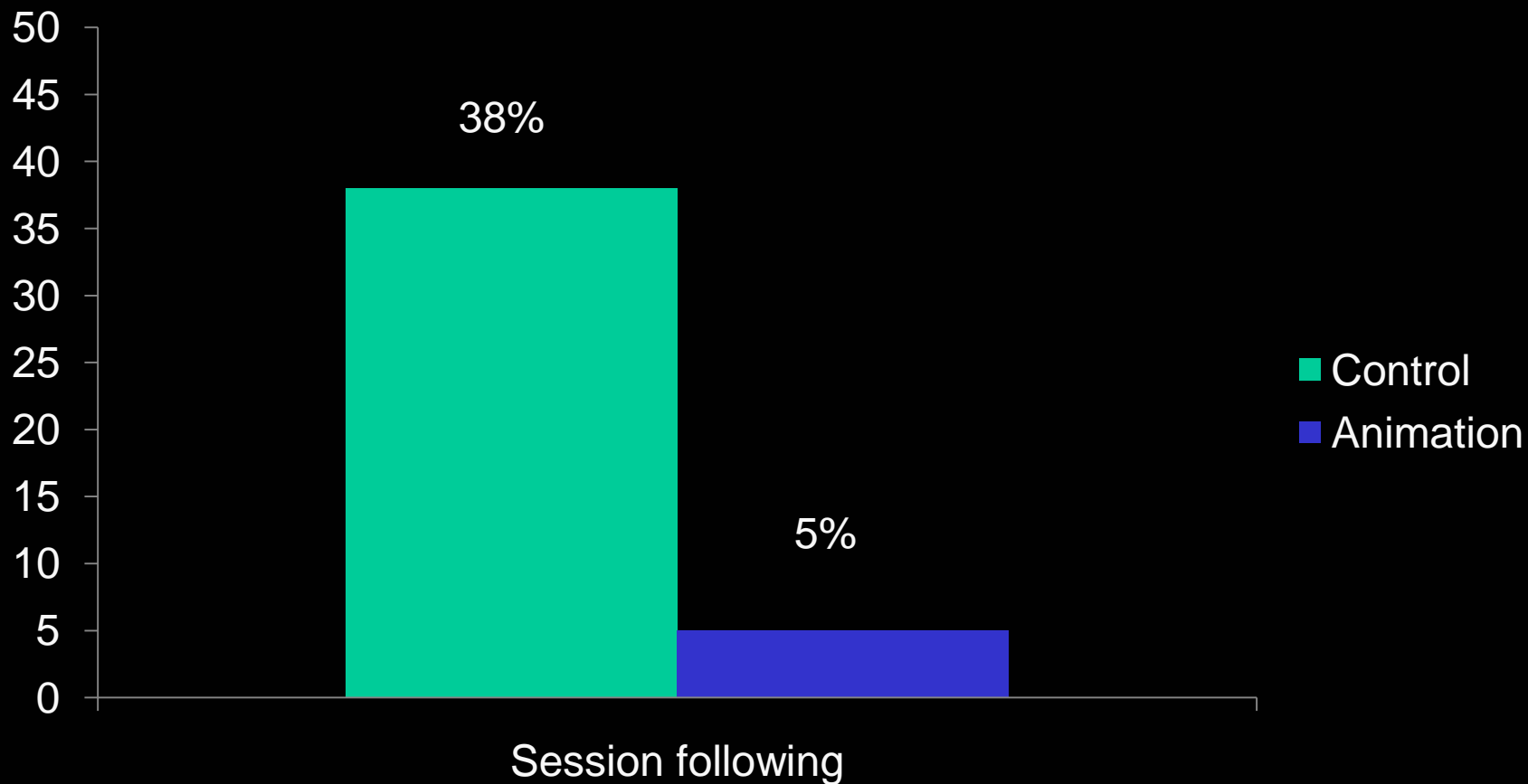


Did you set a limit? (day of RCR session)





Did you exceed your limit? (session after watching video)



$\chi^2(1) = 7.15, p = .007$



Impact

“I was playing this machine and I ran out of credits. I wanted to withdraw more cash to play, and **then I remembered the video and just walked out** to take some time away from the machines (about 5 mins). Afterwards, I decided that I don't want to lose anymore money for tonight. I went back inside and watched my brother play the machines for the rest of my time at the vicinity.”



Should we enforce limits setting adherence? The Issue of Smart Cards

Some authors have suggested that gamblers be required to gamble with cards limited to pre-set amounts of money (i.e. **'smart' cards**) (see e.g., Dickerson & O'Connor, 2006).





Method

- 127 patrons at one of four venues in Brisbane, Queensland, Australia ($M = 40$; range 18-81 years)
 - Sample:
 - 62 non-problem
 - 25 low risk
 - 20 moderate risk
 - 20 problem
- Approached by research assistant on electronic gaming machine floor.



Results

- Problem gamblers said they would only use a smart card if:
 - cards were **refillable**;
 - they were either able to access additional funds as needed
- Problem gamblers **reluctant** to use ‘smart cards,’ despite the fact that they:
 - **often lost track of money** while gambling; and
 - rarely knew if they were winning or losing.



Pop-Up Messages

- **Intermittent messages** that appear on the slot machine screen during play.
- More effective in capturing gamblers' attention than signs and posters (Monaghan & Blaszczynski, 2007).



Methodology

Participants. Fifty-nine young adults

- Age range: 18 to 32 years ($M = 20.76$, $SD = 3.04$)
- 17 recreational, 26 sub-threshold, 16 pathological

Procedure. Randomly assigned to pop-up reminder or no pop-up reminder condition

Measures. Dissociation (Jacobs, 1988), craving (Young & Wohl, 2009), adherence to limits

PAYLINE



BAR

INSERT
BILLS
BELOW

MACHINE ACCEPTS
\$1 - \$5 - \$10 - \$20
PRESS
CASH
CREDIT

How many credits do you want to spend?

OK

WIN

00

CREDITS
PLAYED

BET+

BET-

MAX

SPIN

CASH
OUT

\$0.00

80

0



Credits



PAYLINE



INSERT
BILLS
BELOW
MACHINE ACCEPTS
\$1, \$5, \$10, \$20
PRESS
TAM
COIN

CREDITS
PLAYED

You have reached your preset limit of 20.
You still have 60 credits in the machine.
Do you want to continue?

Yes No

CASH
OUT

BET+

BET-

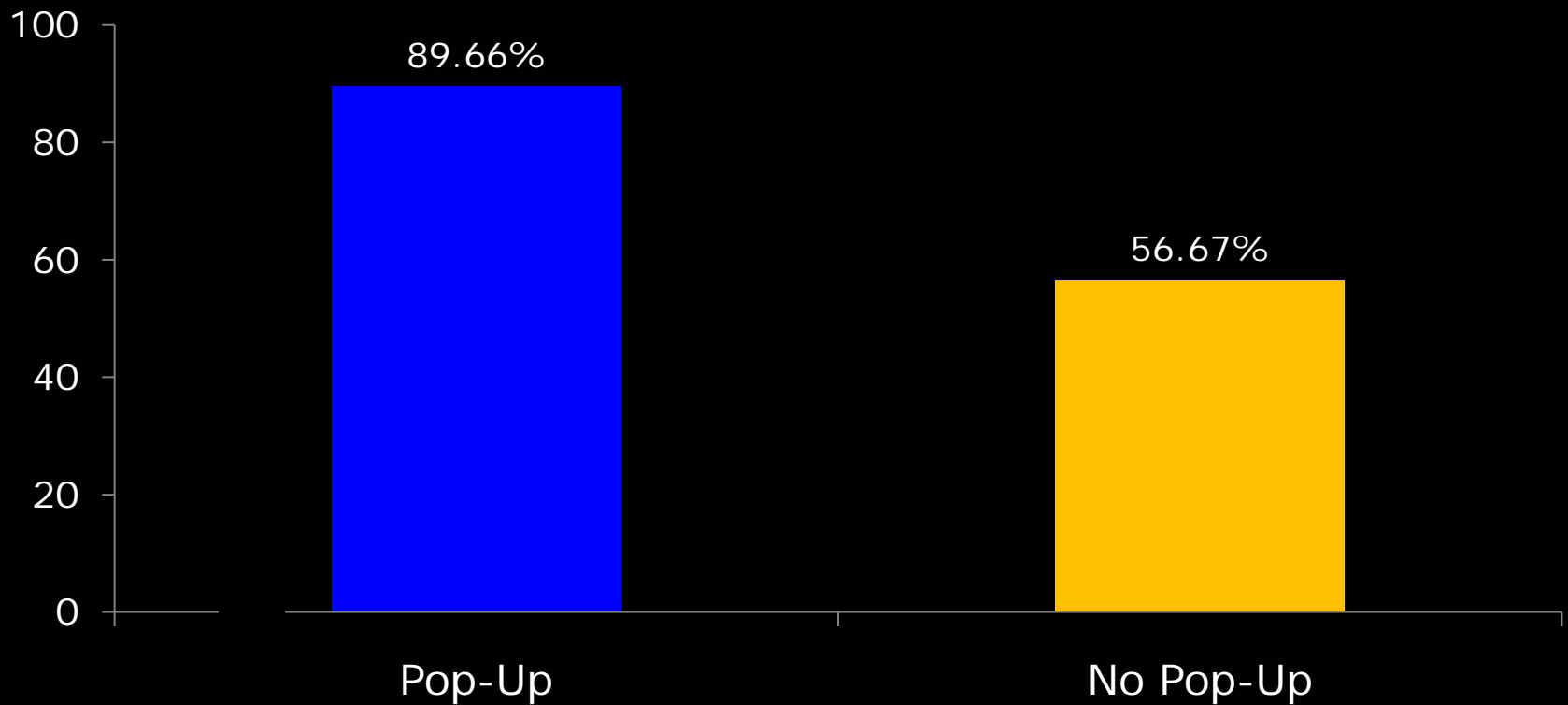
SPIN

RECALL

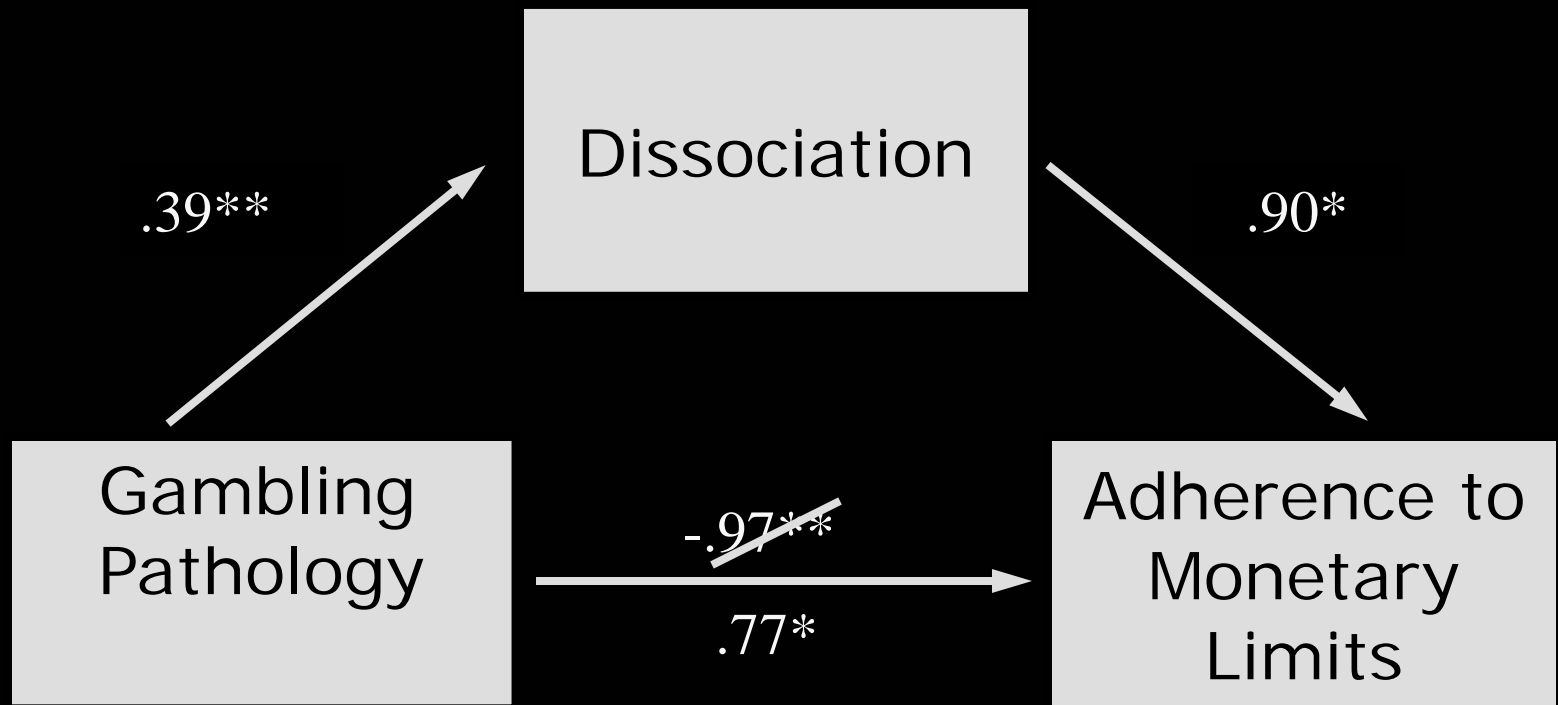
RECALL



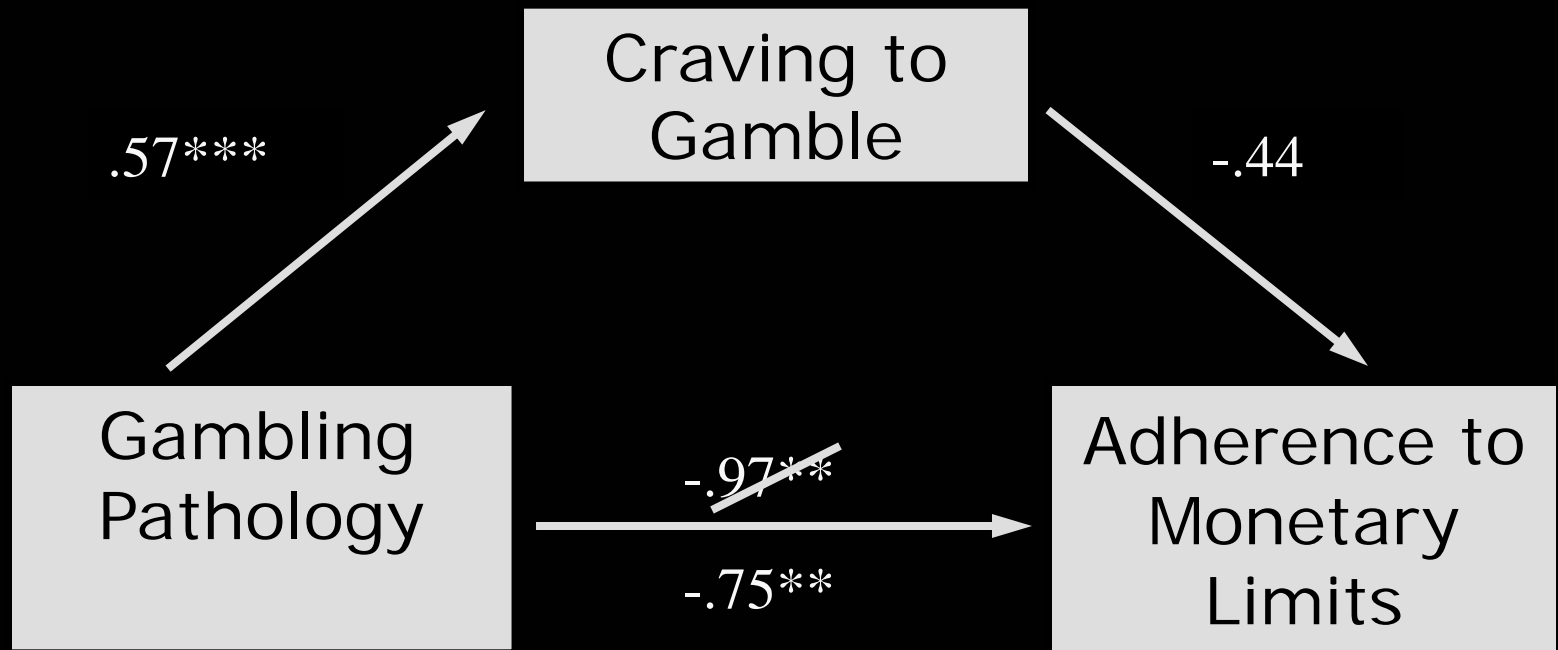
Adherence to Monetary Limits



$\chi^2(1, N = 59) = 14.12, p < .001$



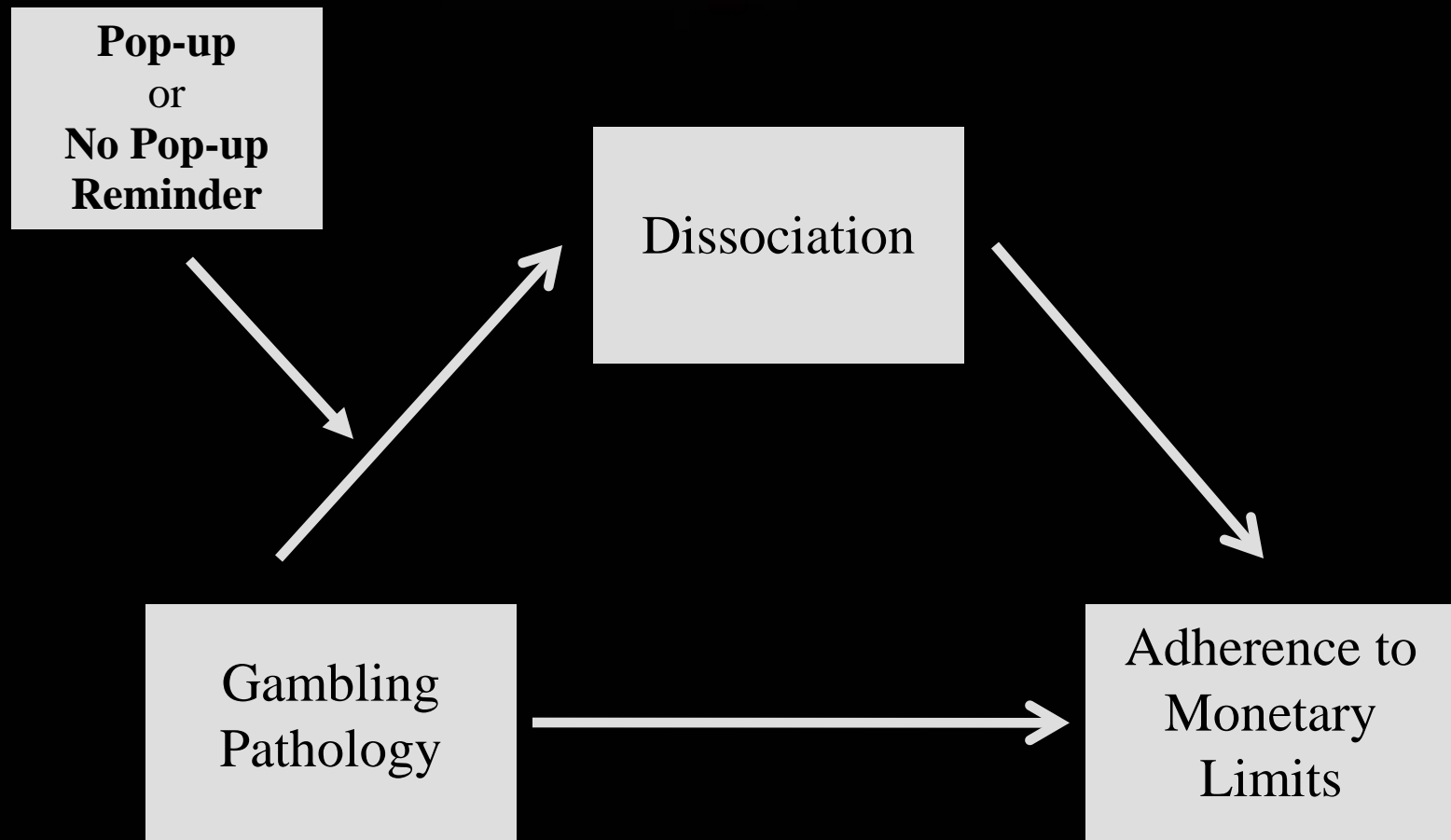
(CI^{95%} = -1.01, -.05)



(CI^{95%} = -.81, .21)



Moderated-Mediation: Dissociation





Discussion

- Monetary limit pop-up reminders effective responsible gambling strategy at lower levels of pathology.
- Mechanisms by which gambling symptomatology undermined adherence to limits:
 - Dissociation
 - Craving to gamble





Ongoing research...

- Animation and pop-up
 - Preliminary findings:
 - Animation reduces limit set and promotes adherence
- Time limits
 - May, 2011



Conclusions

Are Loss Limits and Pre-commitment Strategies Effective Prevention Measures for At-Risk Gamblers?

- Animations can help with micro-level RG
- Pop-up messages might be a key macro-level initiative with at-risk
- More exploration is needed to assess features that will assist PGs