Need Satisfaction in Gambling

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- **Presentation Outline**

- Background Information
  - Basic psychological needs and need satisfaction
  - Need compensation and need frustration
  - Escape need dissatisfaction (END)

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Exam question for those here last year:
- **"What are your ABCs?"**

- **Presentation Outline**
- Background Information
  - Basic psychological needs and need satisfaction
  - Need compensation and need frustration
  - Escape need dissatisfaction (END)
- Preliminary Study Results - EGM Participants
  - Socio-demographic characteristics and frequency of play
  - Need satisfaction and END through EGM play
  - Predicting frequency of play and problem gambling
- Conclusion

Basic Psychological Needs

- Baumeister and Leary's (1995) criteria included:
  - directs cognitive processing
  - motivates toward satiation or satisfaction
  - has affective consequences (e.g., happiness)
  - impacts a broad variety of behaviours
  - operates across a wide variety of settings
  - is universal
  - is medically, psychologically, and/or behaviourally harmful if <u>not</u> satisfied

Basic Psychological Needs

- Deci and Ryan (1991; Ryan & Deci, 2000; 2002) held there were three basic or fundamental needs.

- Thus, their basic needs theory (BNT) is comprised of:

BNT – Three Types of Basic Needs

1. *Need for autonomy* - which involves freedom to (typically through personal choice), and self-endorsement of, one's activities.

2. *Need for competence* - which involves effective functioning and, in turn, the desire to seek out and conquer ever bigger challenges.

BNT – Three Types of Basic Needs

3. ***Need for interpersonal relatedness*** - which involves people feeling that:

- they are loved by and connected to others

- those others understand them

- they are meaningfully involved with the broader social world

- (Because this one is comparable to Baumeister & Leary's need to belonging, I often remind my students to remember their "ABC's").

BNT – Need Variation Across Domains

- BNT-based research has also discovered that need satisfaction can vary across domains. E.g.,

- An experience-sampling method study (Ryan, Bernstein, & Brown, 2010) found that American workers' ABC needs were satisfied <u>less</u> during paid work than non-work activities.

- And Ryan et al. added that this effect may have been underestimated because they did not differentiate among the different kinds of non-work (e.g., leisure, household chores, etc.).

BNT – Need Compensation and Leisure

- Blanchard, Vallerand, and Provencher (2000) added:

- If a basic need was <u>not</u> satisfied in one domain (e.g., work), there could be an attempt to remedy this deficiency in another domain (e.g., sports).

- Noteworthy here is that Allport argued that leisure could serve as a form of "need compensation" for oppressive work in 1924.

Need Compensation and Gambling

- Neighbors et al. (2007) proposed that engaging in risky behaviours—such as gambling—could be a more or less maladaptive strategy for satisfying the needs for autonomy, belonging, and competence. (p. 101)

Need Satisfaction, END, and Leisure

- Iso-Ahola (1982) posited an approach/avoidance leisure model that involved both:

- Seeking psychological need satisfaction through the:
  - Interpersonal environment (e.g., connectedness)
  - Personal environment (e.g., competence)

- Escaping the:
  - Interpersonal environment (e.g., problems, failures)
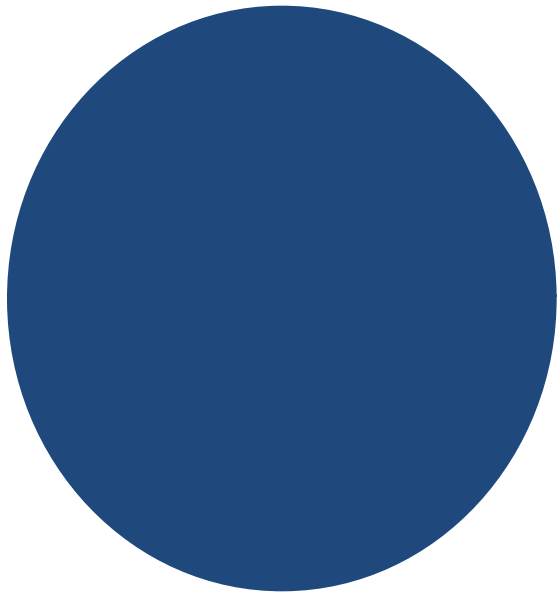 - Personal environment (e.g., co-workers, friends)

Need Satisfaction, END, and Leisure

- Baumeister (1990) held that one of the reasons for the rise in "escapist" activities (e.g., mountain climbing, but also alcohol use and abuse), was:

- to avoid thinking bad thoughts about oneself (i.e., low self-esteem—with Sheldon et al., 2001, noting that this self-concept could be a broader manifestation of the need for competence).

- **Need Satisfaction, END, and Gambling**

- McCormick (1987) speculated that a dysfunctional "strong and enduring need state" could be briefly dulled by escape into "the high stimulus environment of the casino or track". (p. 260).

- And non-BNT studies have found, for example, that gambling on electronic gaming machines (EGMs) was an escape from negative reflection (Rockloff et al., 2011; see also Weatherly et al., 2010; Thomas et al., 2009; Wood & Griffiths, 2007).
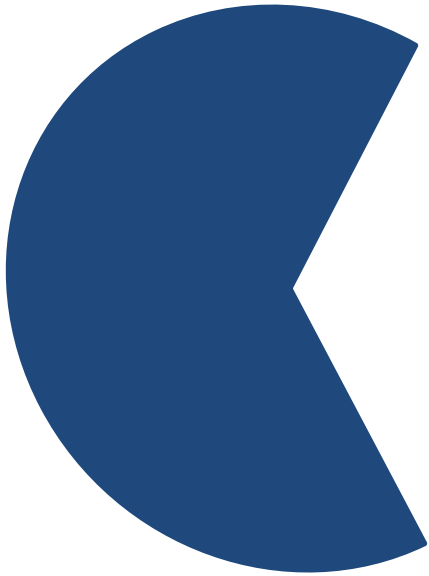
- **My Study – Research Objectives**

- **To examine the degree to which:**

  – People's needs for autonomy, belonging, and competence are satisfied in: (a) the gambling leisure domain, (b) the non-gambling leisure domain, and (c) the non-leisure domain.

  – People try to compensate for and/or escape from need dissatisfaction in the non-leisure domain thru engagement in: (a) the EGM-gambling leisure domain and/or (b) the non-gambling leisure domain.

  – Need satisfaction, need compensation, and END influences people's subjective well-being.

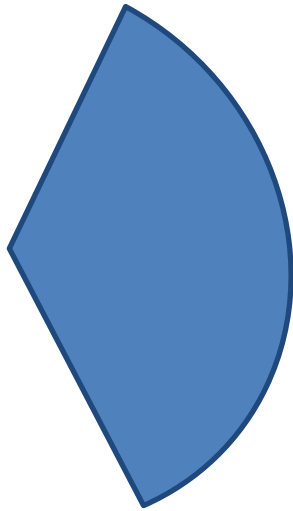Faculty of Physical Education & Recreation
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Entire Life (e.g., Work, Family, Leisure, etc.)

**Non-Leisure
Domain**

**Leisure
Domain**

Non-Leisure Domain

Non-Gambling Leisure Domain

Gambling Leisure Domain

Non-Leisure Domain

Non-Gambling Leisure Domain

Non-EGM Gambling Leisure Domain

EGM-Gambling Leisure Domain

If Dissatisfied Here
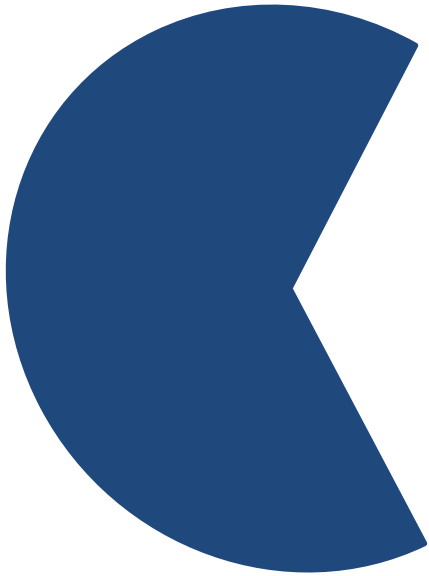
Non-Leisure Domain

Non-Gambling Leisure Domain

Non-EGM Gambling Leisure Domain

EGM-Gambling Leisure Domain

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If Dissatisfied Here

Then Compensate For, and/or Escape Through Engagement:

Here or **Here** or **Here**

Non-Leisure Domain

Non-Gambling Leisure Domain

Non-EGM Gambling Leisure Domain

EGM-Gambling Leisure Domain

• My Study – Measures
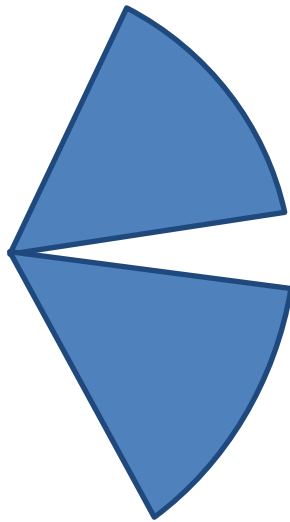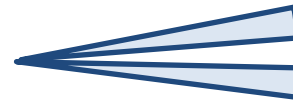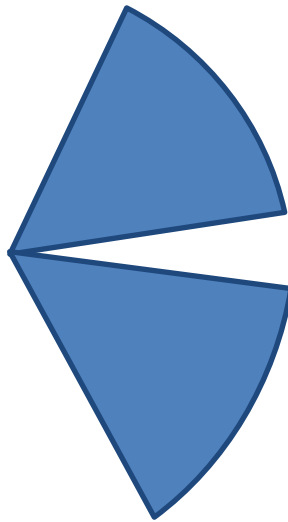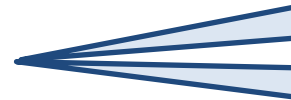
- **Leisure participation** (1 item per 12 activity types)
- **Gambling prevalence** (1 yes/no item, and if necessary a follow-up frequency item, per 5 gambling types)
- **Basic need satisfaction** (3 items per need, based on Van den Broeck et al.'s, 2010, work-related basic need satisfaction scale. Each item measured on a 5-point Likert scale.)
  - **For non-gamblers and non-EGM gamblers**, scales measured need satisfaction in the leisure and non-leisure domains
  - **For EGM gamblers**, scales measured need satisfaction in the EGM-gambling leisure domain, non-gambling leisure domain, and the non-leisure domain

- **My Study – Measures**
  - **Escape need dissatisfaction** (3 items per need, based on Van den Broeck et al.'s, 2010, W-BNS. Each item measured on a 5-point Likert scale.)
    - **For non-gamblers and non-EGM gamblers**, scales measured END through engagement in the leisure domain
    - **For EGM gamblers**, scales measured END through engagement in the EGM leisure domain and the non-EGM leisure domain
  - **Subjective well-being** (i.e., positive and negative affect; life satisfaction; SWLS, Diener et al., 2005)
  - **Problem gambling** (5 CPGI items; Smith & Wynne, 2002)

- **My Study – Data Collection**
  - Computer-assisted telephone interviewing (CATI)
  - Edmonton metropolitan area residents
  - Approximately equal number of non-gamblers, non-EGM gamblers, and EGM gamblers
  - Approximately equal number of males and females
  - Three wave panel study (i.e., re-contacted approximately every four months)
  - Participants remunerated $10 per Wave

Wave 1	Wave 2	Wave 3
• Data collected June - Aug., 2014	• Data collected Oct. - Dec., 2014	• Data collection <u>began</u> Feb., 2015
• N = 795, with:	• N = 646 (81%):	• N = 527 (66%):
- 285 non-gamblers	- 241 non-gamblers	- 233 non-gamblers
- 276 non-EGM gamblers	- 228 non-EGM gamblers	- 213 non-EGM gamblers
- 234 EGM gamblers	- 177 EGM gamblers	- 81 EGM gamblers

Wave 1

- Data collected June - Aug., 2014
- N = 795, with:

- 285 non-gamblers
- 276 non-EGM gamblers
- **234 EGM gamblers**

Remainder of the presentation will focus on these participants.

Wave 2

- Data collected Oct. - Dec., 2014
- N = 646 (81%):

- 241 non-gamblers
- 228 non-EGM gamblers
- 177 EGM gamblers

Wave 3

- Data collection <u>began</u> Feb., 2015
- N = 527 (66%):

- 233 non-gamblers
- 213 non-EGM gamblers
- 81 EGM gamblers

- **EGM Gamblers' Socio-Demographics**

CHARACTERISTIC	FREQUENCY: %	
– Females:	57%	
– Age 50 and over:	68%	
– Married/partner:	64%	
– College/some university:	56%	
– Yearly household income:	36%	$50-100K
	40%	$+100K

- **EGM Gambling Prevalence**

- During the past four months, played:

GAME	PEOPLE: N(%)	FREQUENCY: M(SD)
– VLT	35 (15%)	6.72 (11.14)
– Slot machine	114 (49%)	5.02 (7.59)
– Both	85 (36%)	9.42 (10.33)

- **EGM Problem Gambling**
- During the past four months:

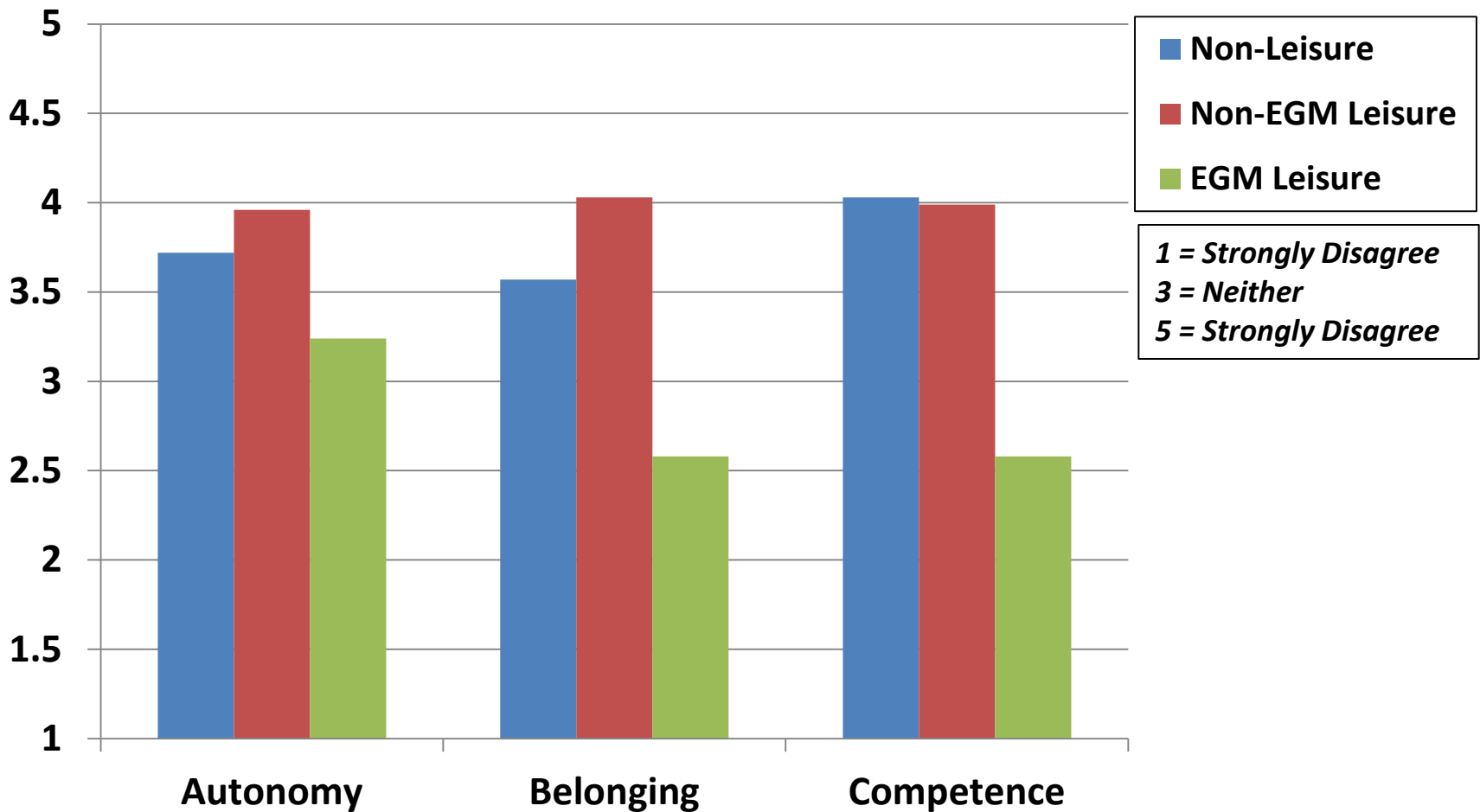| GAME	CPGI SCORE: *M*(*SD*)
– VLT	1.42 (0.64)
– Slot machine	1.28 (0.43)
– Both	1.38 (0.63)

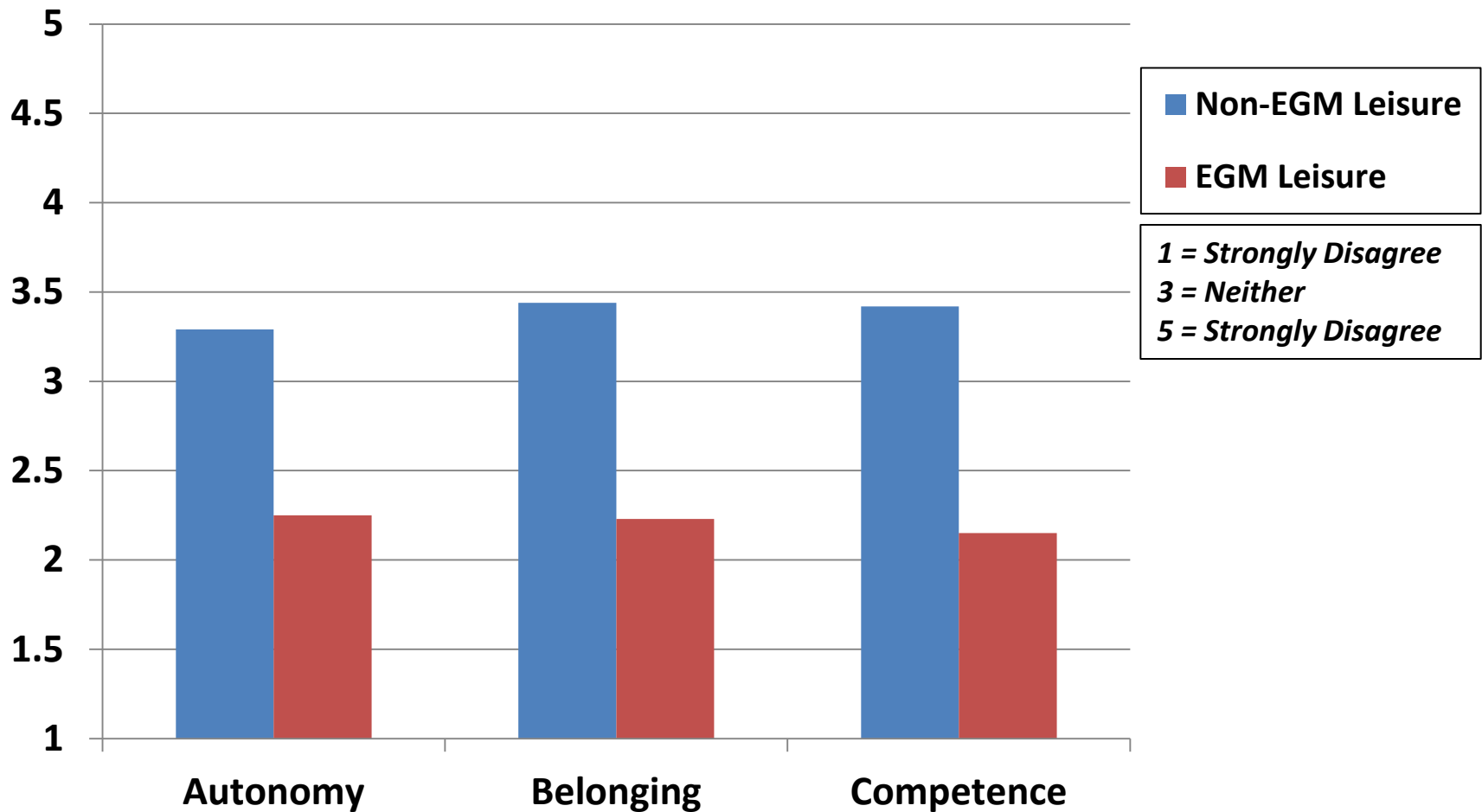- CPGI items measured on a 4-point unipolar scale (1 = Never to 5 = Almost always).

EGM-Gamblers - Escaping Need Dissatisfaction

Legend:
- Non-EGM Leisure
- EGM Leisure

1 = Strongly Disagree
3 = Neither
5 = Strongly Disagree

Categories: Autonomy, Belonging, Competence

- **Need Satisfaction, END, and EGM Play**
- A series of stepwise regressions were conducted to predict EGM **frequency of play** and **problem gambling**. Variables submitted each time were:
  - Autonomy need satisfaction thru EGM play
  - Belonging need satisfaction thru EGM play
  - Competence need satisfaction thru EGM play
  - Escape autonomy need dissatisfaction thru EGM
  - Escape belonging need dissatisfaction thru EGM
  - Escape competence need dissatisfaction thru EGM

- **EGM Need Satisfaction, END, and Play**

- **Frequency of play**, for <u>all</u> EGM gamblers, was predicted by:

  – Competence need satisfaction thru EGM play ($p < .05$; $β = 1.48$; partial $R^2 = .05$)

  – Escape belonging need dissatisfaction thru EGM play ($p < .05$; $β = 1.34$; partial $R^2 = .02$)

- **EGM Need Satisfaction, END, and Play**
- **Frequency of play**, for slot machine gamblers only, was predicted by:
  - Escape autonomy need dissatisfaction thru EGM play ($p < .05$; $β = 3.18$; partial $R^2 = .09$)
  - Competence need satisfaction thru EGM play ($p < .05$; $β = 2.05$; partial $R^2 = .03$)
  - Escape competence need dissatisfaction thru EGM play ($p < .01$; $β = -5.14$; partial $R^2 = .03$)
  - Escape belonging need dissatisfaction thru EGM play ($p < .10$; $β = 3.09$; partial $R^2 = .03$)

- **EGM Need Satisfaction, END, and Play**

- **Frequency of play**, for gamblers who played both VLTs and slot machines, was predicted by:

  – Escape competence need dissatisfaction thru EGM play ($p < .10$; $B = 1.47$; partial $R^2 = .04$)

  - **In summary**, the inclusion of END did help predict frequency of play to some degree, especially in terms of slot machine gambling.

- **EGM Need Satisfaction, END, and PG**

- **Problem gambling**, for <u>all</u> EGM gamblers, was predicted by:

  – Escape belonging need dissatisfaction thru EGM play ($p < .0001$; β = -0.98; partial R^2 = .12)

  – Belonging need satisfaction thru EGM play ($p < .01$; β = 0.20; partial R^2 = .03)

- **EGM Need Satisfaction, END, and PG**

- **Problem gambling**, for slot machine gamblers only, was predicted by:

  – Escape belonging need dissatisfaction thru EGM play ($p < .0001$; $\beta = 0.48$; partial $R^2 = .17$)

  – Escape competence need dissatisfaction thru EGM play ($p < .0001$; $\beta = -0.36$; partial $R^2 = .12$)

- **EGM Need Satisfaction, END, and PG**

- **Problem gambling**, for gamblers who played both VLTs and slot machines, was predicted by:

    - Escape autonomy need dissatisfaction thru EGM play ($p < .0001$; $β = 0.27$; partial $R^2 = .19$)

    - Competence need satisfaction thru EGM play ($p < .10$; $β = -0.12$; partial $R^2 = .04$)

- **In summary**, END appears to be a better predictor of problem gambling (in terms of both increases and decreases) than frequency of play.

- **Conclusion**
- Preliminary findings suggest that it may be less:
  - gambling is a more or less maladaptive strategy for satisfying the needs for autonomy, belonging, and competence (as per Neighbors et al., 2007),
  - than a strategy to escape these needs not being sufficiently satisfied in the non-leisure domain.

- **Conclusion**

- Programs and policies that help people better satisfy their needs would be ideal.

- However, given people may have an innate *need* to escape (Baumeister, 1991), provision of less maladaptive "escape routes" may be an alternative.

- Preliminary study findings are limited by their cross-sectional nature (which, of course, is why longitudinal research is essential.)

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Thank You. Comments and questions?