




# ASIAN GAMBLING AND CHALLENGE FOR RESEARCH: CULTURE AND GAMBLING RELATED BELIEFS

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# Asian culture and gambling

- Many gaming patrons of Asian appearance
  - Are they tourists or residents?
- higher prevalence of problem gambling among Asian gamblers (e.g., Victorian Casino and Gaming Authority, 2000)
- Are Asian gamblers different from non-Asian gamblers?
- Which Asian cultural values and beliefs are predictive of their gambling behaviour?

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- Asian culture and Western culture:
    - Are they different in any way?
  - Culture - universal versus culture-specific definitions.
  - Culture in relation to migration and acculturation process.
  - Culture, gambling and adjustment stress?
  - Is gambling an outcome of the acculturation to Western culture?


# Chinese and gambling

- Chinese notion of luck is predetermined (fixed) and not under volitional control. Chinese believe that they can decipher the cyclical changes of luck using Chinese celestial calendar or oracles (Papineau, 2005)
- The patterns of Chinese gambling are a reflection of their cultural views - (Papineau, 2005).
- Luck as the ebb and flow of “cyclical” luck (Ohtsuka & Ohtsuka, 2010)
  - “For Chinese, placing a bet to find out their luck is not gambling” (Personal communication, 2012)
  - “If you don’t gamble, you don’t know how lucky you are - A Chinese saying” —Anonymous Chinese gambler (Fong)



Gamblers use universal and culture-specific schemas to explain luck (Ohtsuka & Ohtsuka, 2010).

Culture influences gambling behaviour. People in some cultures gamble more than others. (Raylu & Oei, 2004).

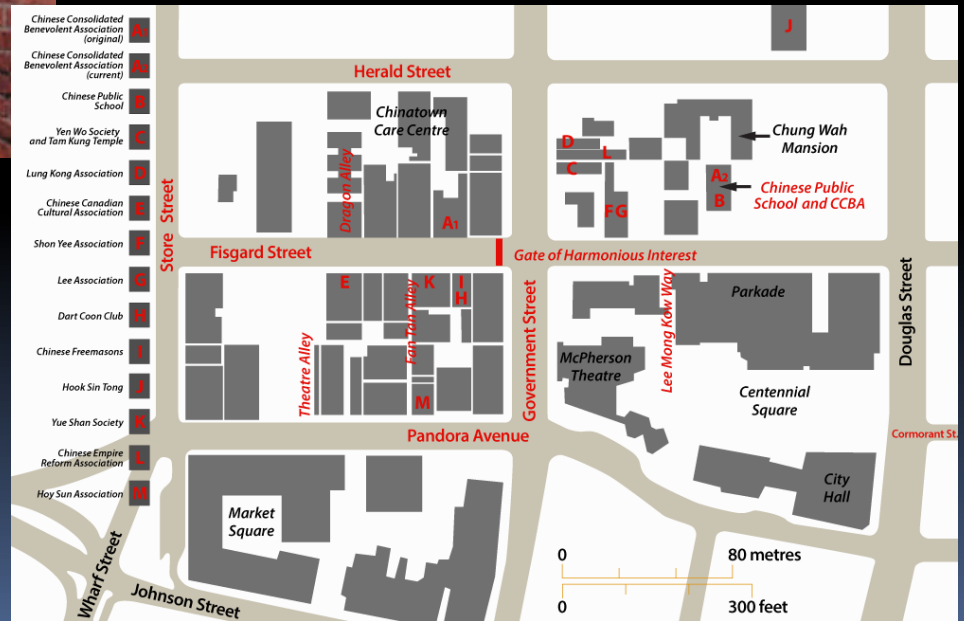


Gamblers from culturally and linguistically diverse backgrounds (CALD) in Australia show significantly higher prevalence rates of problem gambling (Victorian Casino and Gaming Authority, 2000)

# Fan Tan gambling kit used in Chinese gambling Hall, Calgary in 1928



# Fan Tan Alley, Victoria, BC



# Gambling in India

- Hindu Mythology

The god Shiva (consciousness) and his wife Parvati (experience) played dice games. They tried to cheat to win but Parvati (experience) always won and Shiva had to rid of his possessions. Angry Shiva (consciousness) fled to exile.



# Shiva cheats against Parvati

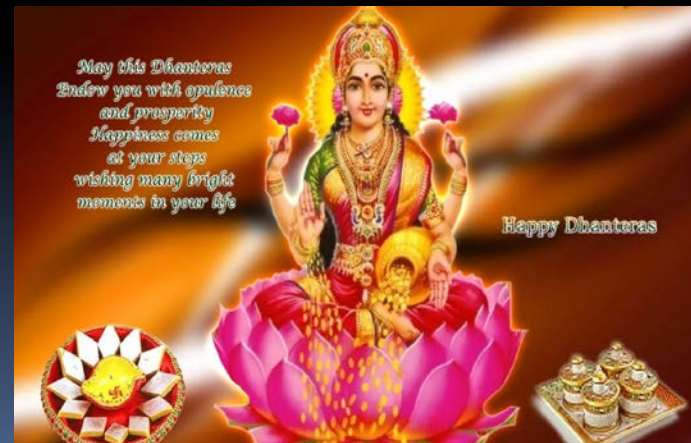
- Dice games gave Shiva and Parvati two opposing perspectives. All knowing Shiva (consciousness), however, was beaten by Parvati (experience). Consciousness hence learnt to flee experience.



## Diwali (Festival of Lights) and gambling

The tradition of gambling on Diwali has a legend behind it. It is believed that on this day, Goddess Parvati played dice with her husband Shiva, and she decreed that whoever gambled on Diwali night would prosper throughout the year.

Diwali is associated with wealth and prosperity in many ways, and the festival of 'Dhanteras' ('dhan' = wealth; 'teras' = 13th) is celebrated 2 days before the festival of lights.



# Role of Folk Religion

- The Chinese folk religion has a pragmatic material focus on prayer for wealth, prosperity and luck, which may encourage Chinese to gamble. However, the observance of Chinese folk religion does not necessarily mean that the Chinese believe that they can “control” their luck. (Ohtsuka, 2013).

# Role of cultural schema in cultural comprehension

## Universal versus culture-specific schema

While the mechanism and the process by which schemas (mental representation) are developed are universal, the **instantiated** schema could be culture-specific as it is created by knowledge base and incoming information.

i.e., any person can observe cultural events but need to have cultural knowledge to understand its meaning.

# Emic vs. Etic

- Linguistic metaphor in cultural anthropology (Pike, 1954)

## 1. Emic

Emic knowledge and interpretations are those existing within a culture, that are 'determined by local custom, meaning, and belief'

Culture is specific - it is "native" within the cultural context.

## 2. Etic

Etic approach shifts focus from local observations, categories, and explanations to interpretations to those of anthropologists. Ethnographers emphasise what they consider important.

- Culture is universal. It is possible to measure it on the universal scales and compare them.

# Culture and Universality

Strong version of cultural specificity

Equivalent to the Sapier-Wolfe Hypothesis on linguistic determinism => languages determine cognition and thoughts.

- To understand a specific culture, must understand its uniqueness from within.
- Not easily translated across culture

# Interactionist view: Cultural schema - universal vs. cultural schemas

- mechanism by which organizes incoming information - universal
- Some of cultural schemas are based on culture-specific schemas, e.g., Quả báo (replayment or karma) (Ohtsuka & Ohtsuka, 2010)
- Schema or mental representation forms a basis of cultural comprehension.

# Use of acquired cultural schema

- ABC Radio National Life Matters Friday Talkback: Luck, what is it and why do we believe in it? (5 July 2013) [bit.ly/14R6ORr](http://bit.ly/14R6ORr)
- Steven Bradbury - The 2002 Salt Lake City Winter Olympics - 1,000 m short track speed skating Gold Medalist





“In 2002 Australian speed skater Steven Bradbury won our first ever Winter Olympic gold medal when the skaters ahead of him all crashed out of the race. If that isn't one of the luckiest things to happen to someone, what is?

We talk to Steven about his take on this lucky break.”

Steven Bradbury explains this extraordinary events partly using a concept of karma. All the hard slog training for a sport, sportsmanship, and a major training accident in which he almost died due to blood loss, he believes, may be rewarded in the end with an extraordinary run of luck

- Use of an unfamiliar cultural schema.

# What is luck?

- differs from chance governed by probabilities
- operates in a counterintuitive manner (as if in alternative worlds)
- is governed by supernatural agents
- *subjective* beliefs and experiences cannot be reliably validated through logical deduction or empirical deduction.

# Luck is associated with

- equanimity
- positive attitudes/emotions/mood
- lack of greediness
- time or day
- to be at the right place at the right time
- karma (retribution) - do the right thing to others then good things would happen
- just worldview - fairness
- inner positive quality - intelligence, knowledge, experience

(Ohtsuka & Ohtsuka, 2010)

# Superstitions and rituals

- folk knowledge
- the secondary control (imaginary control)
- often present in a situation when the primary control is absent
  - Deep sea fishing vs. lagoon fishing (Malinowski, 1925/1954)
  - batting vs. fielding in baseball (Gmelch, 2006)

Also explained in the degree of “control”

# Cultural universality: culture as a mindset

Culture is a *primed* mindset: Default point of view in perceiving, processing, and organising information. One can adopt a mindset can be changed to adopt other viewpoints (Oyserman et al., 2009, 2013)

e.g., Use of Asian cultural schema: Karma by non-Asian Australians.

# Universal or culture-specific ?

- Based on the same cognitive mechanism
- Existence/absence of a cultural schema
  - Universality + Specificity
  - Culture promotes a mindset that influences what is attended to, which goals or mental procedure is salient. (Oyserman, Sorensen, & Reber, 2009). Switching to a less salient mindset is possible.
- Culture as situated cognition

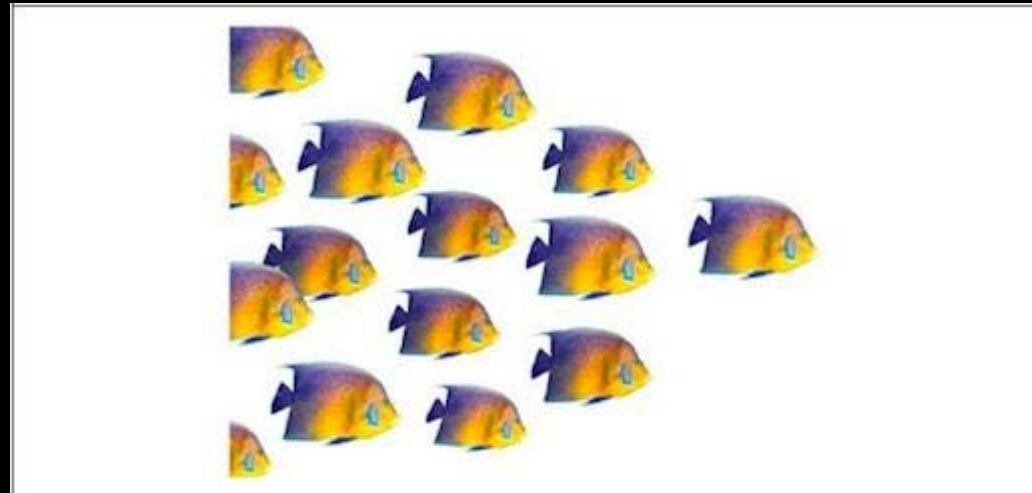
# Cultural bias and interpretation

Is the fish in front leading the pack or are the school of fish chasing the fish in front?

Culture-specific common interpretation:

Individualistic culture - A fish in front leads the rest of the pack.

Collectivist culture - A group of fish is chasing the fish in front.



However, culturally salient cues presented (priming) influence the type of interpretation.

e.g., accented English



# Gambling Beliefs and Cultural Influence

Ohtsuka & Ejoa (2014). *Making sense of erroneous gambling-related beliefs*. International Gambling Conference, Auckland, New Zealand.



# Erroneous Gambling-Related Beliefs

## 1. Illusion of control: 'primary' and 'secondary'

- primary = overestimation of the extent to which certain *conventional* personal actions increase the probability of winning
- secondary = overestimation of the extent to which certain *magical/supernatural* actions increase the probability of winning
- Surveys of EGRBs
  - “My knowledge and skill in gambling contribute to the likelihood that I will make money” (Steenbergh et al., 2002)
  - “I have specific rituals and behaviours that increase my chances of winning” (Raylu & Oei, 2004)

# Categories of EGRBs

## 2. The gambler's fallacy

The expectation that random sequences (e.g., sequences of Heads and Tails) are highly unlikely to feature overly long runs of any one possible outcome (e.g., eight Heads in a row);

i.e., expectation that the probability of alternation in random outcomes increases with each repetition

# Categories of EGRBs

## 2. The gambler's fallacy - Evidence

- Analyses of number choices in lotteries (Clotfelter & Cook, 1993; Terrell, 1994):
  - numbers were less popular if they had been recently drawn-out
- 'Thinking-aloud' during laboratory slot-machine, roulette and blackjack sessions (Baboushkin et al., 2001):
  - 60% of participants reported expecting a certain outcome because 'it hadn't come up lately'

# Categories of EGRBs

## 3. Beliefs about luck and other supernatural forces

- **Luck is like deities and ultimate justice**
  - Atran and Norenzayan (2004) described the universal features of religious belief – what people believe about deities
  - Gamblers' beliefs about luck appear to have a similar structure:
    1. involve a belief that luck is a supernatural agent who carries out ultimate justice
    2. involve beliefs in rituals (aimed at improving luck)

# Categories of EGRBs

## 3. Beliefs about luck and other supernatural forces

- **Luck is like deities and ultimate justice**
  - Supernatural agency: Players have been found to make references to luck as a force capable of making certain casino tables and slot machines ‘lucky’ for a period of time (King, 1990; Ohtsuka & Ohtsuka, 2010)
  - Ultimate justice: Ohtsuka and Ohtsuka (2010) found that players associated good luck with “being generous”
  - Craps rituals observed by Henslin (1967) and mahjong rituals documented by Ohtsuka and Chan (2010)

# Categories of EGRBs

## Beliefs about luck and other supernatural forces

- **Luck is like deities and ultimate justice**
- **Luck is cyclical:** luck oscillates between being 'good' and 'bad', never staying 'good' for too long
  - beliefs in luck's supernatural agency
  - Players referred to luck as a force capable of making certain casino tables and slot machines 'lucky' **for a period of time** (King, 1990; Ohtsuka & Ohtsuka, 2010; Ohtsuka, 2013)

# Categories of EGRBs

## Beliefs about luck and other supernatural forces

- **Luck is like deities and ultimate justice**
- **Luck is cyclical:** luck oscillates between being 'good' and 'bad', never staying 'good' for too long
  - Both beliefs prescribe actions that can be taken to increase the probability of winning (e.g., perform rituals, wait for lucky day). Thus, both beliefs are related to the illusion of secondary (magical) control.
  - Cyclical luck is also related to the gambler's fallacy: unsuccessful gambling events would increase the likelihood of the future success.

# Cultural differences in EGRB

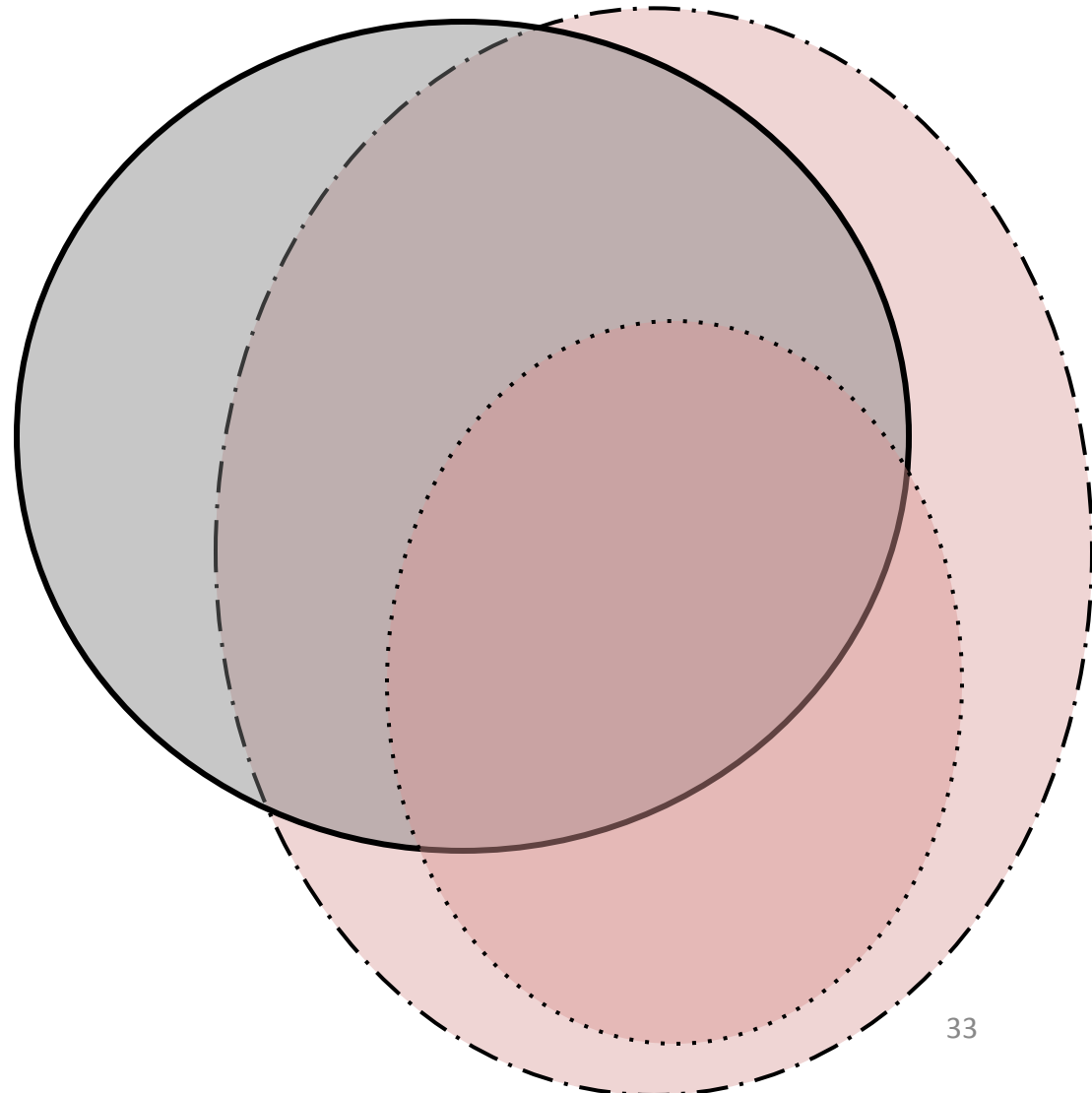
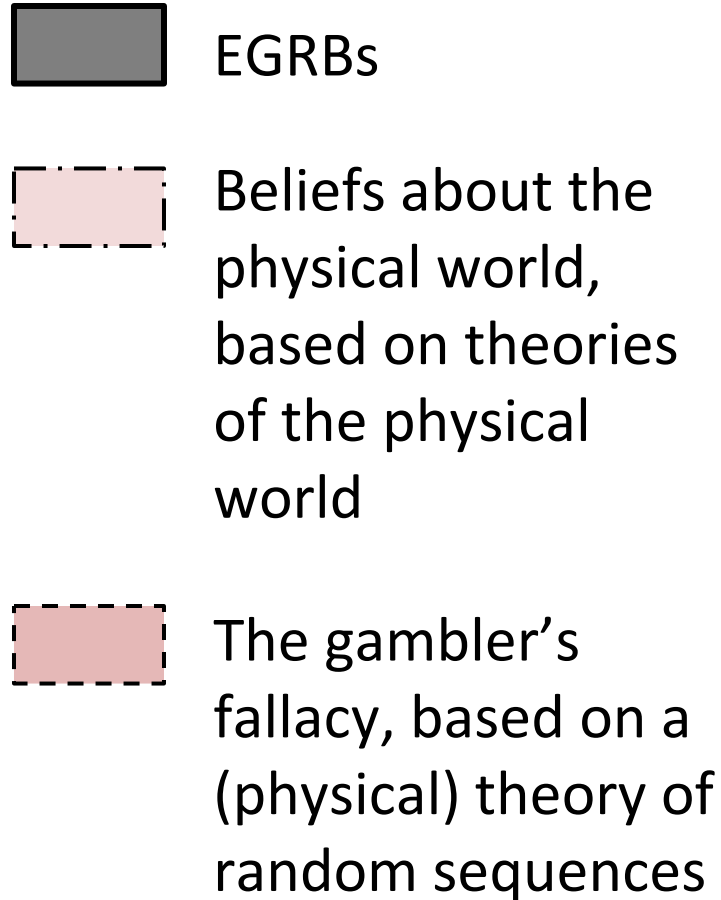
1. Illusion of Primary Control
2. Illusion of Secondary Control
3. Cyclical ebb and tide of luck

Asian Culture emphasises 2. Illusion of *Secondary Control*, 3. Cyclical tide of luck

In contrast, Western culture focuses on 1. Illusion of *Primary Control*



# An explanation for EGRBs: Making sense of category overlaps



# An explanation for EGRBs:

## Making sense of category overlaps



EGRBs



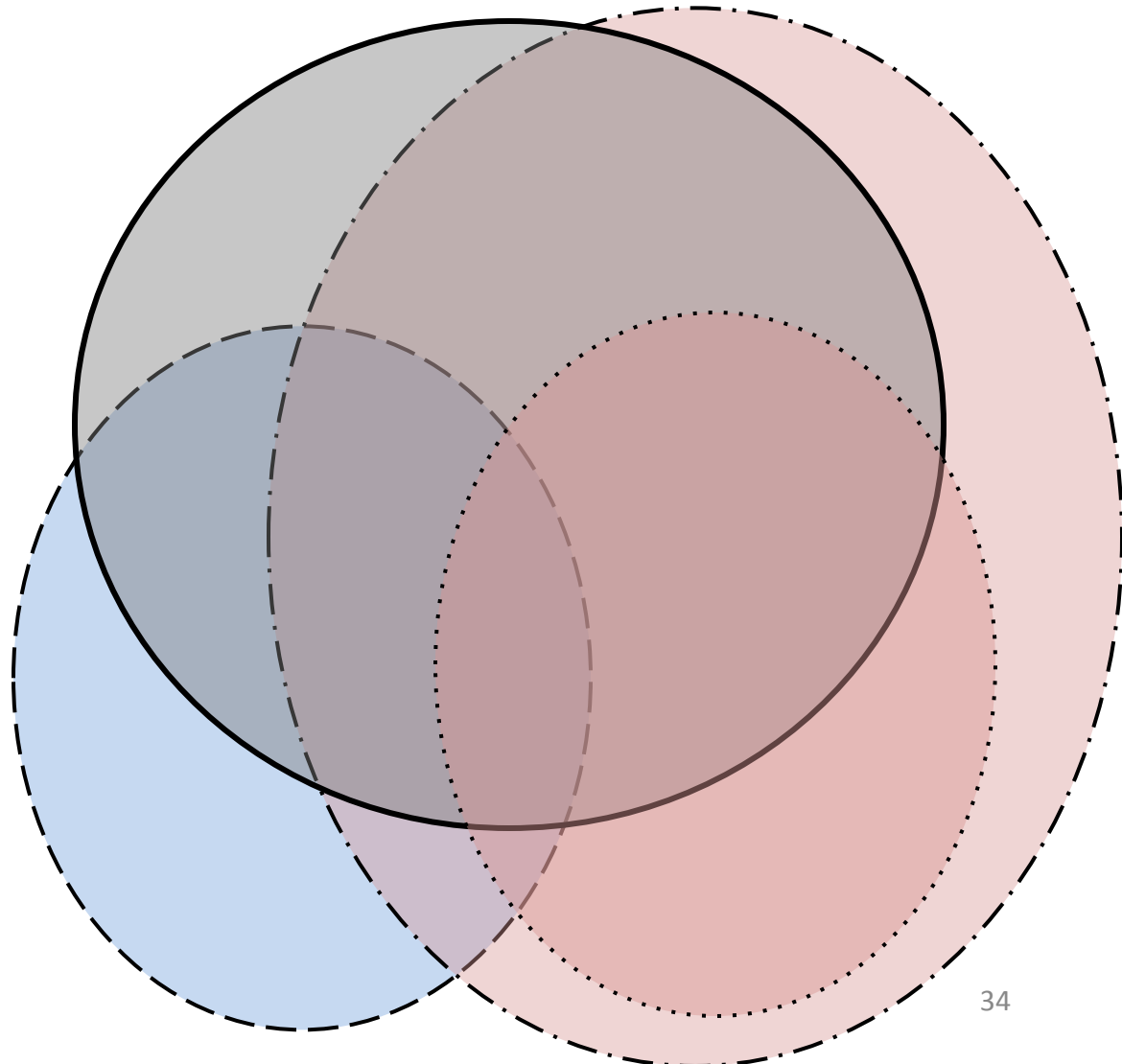
Beliefs about the physical world, based on theories of the physical world



The gambler's fallacy, based on a (physical) theory of random sequences



Beliefs about deities and supernatural agents, based on a broader theory of such phenomena

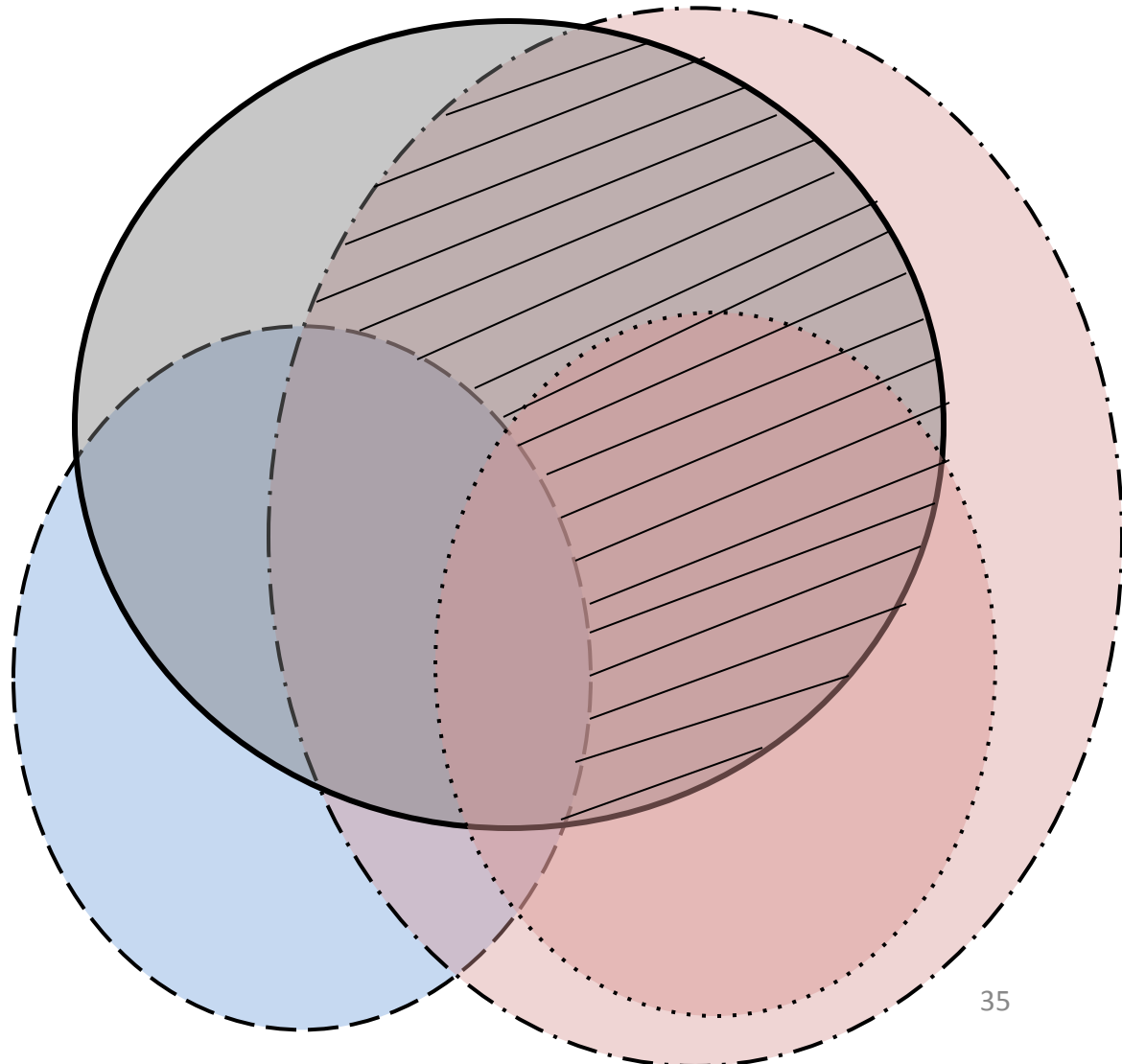


# An explanation for EGRBs:

## Making sense of category overlaps



The illusion of primary control: overestimation of the extent to which certain *conventional* personal actions increase the probability of winning in a game of chance



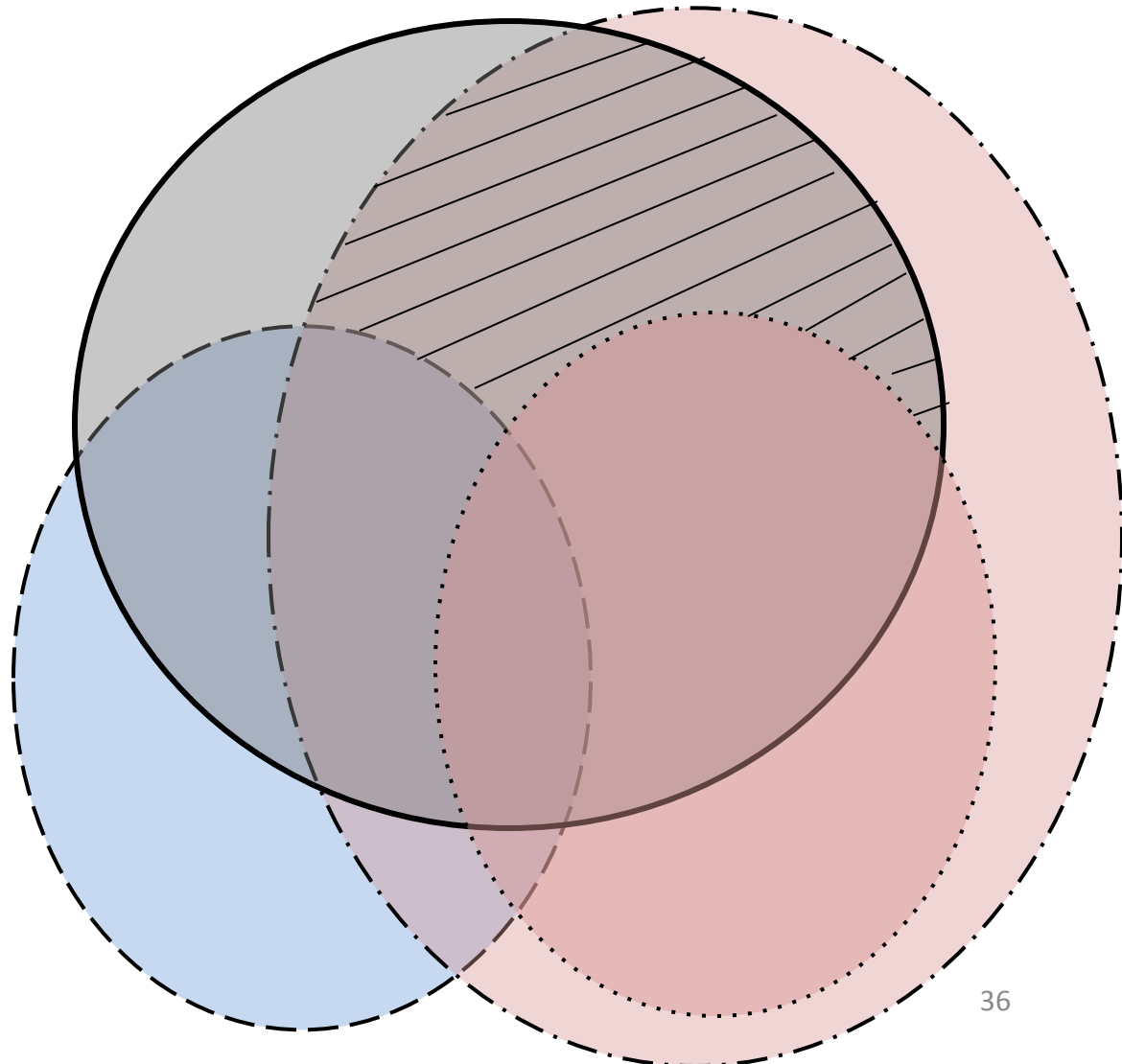
# An explanation for EGRBs:

## Making sense of category overlaps



The illusion of primary control based on beliefs about the physical world – e.g.:

- “Throwing the die harder will result in a higher number”
- “Free spins can be used to one’s advantage”



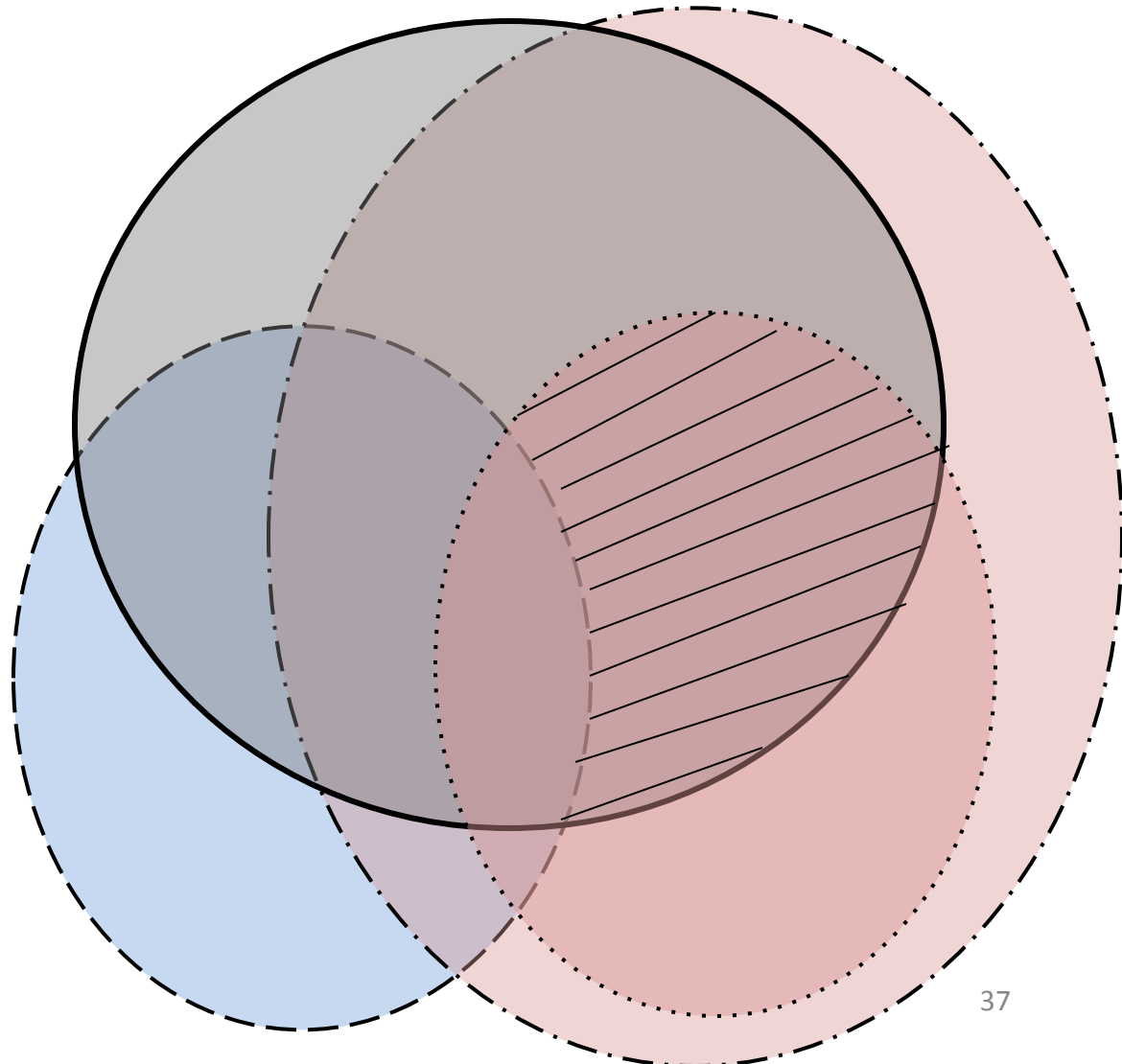
# An explanation for EGRBs:

## Making sense of category overlaps



The illusion of primary control based on the gambler's fallacy – e.g.:

- “You should always choose a machine that has not paid out in some time”

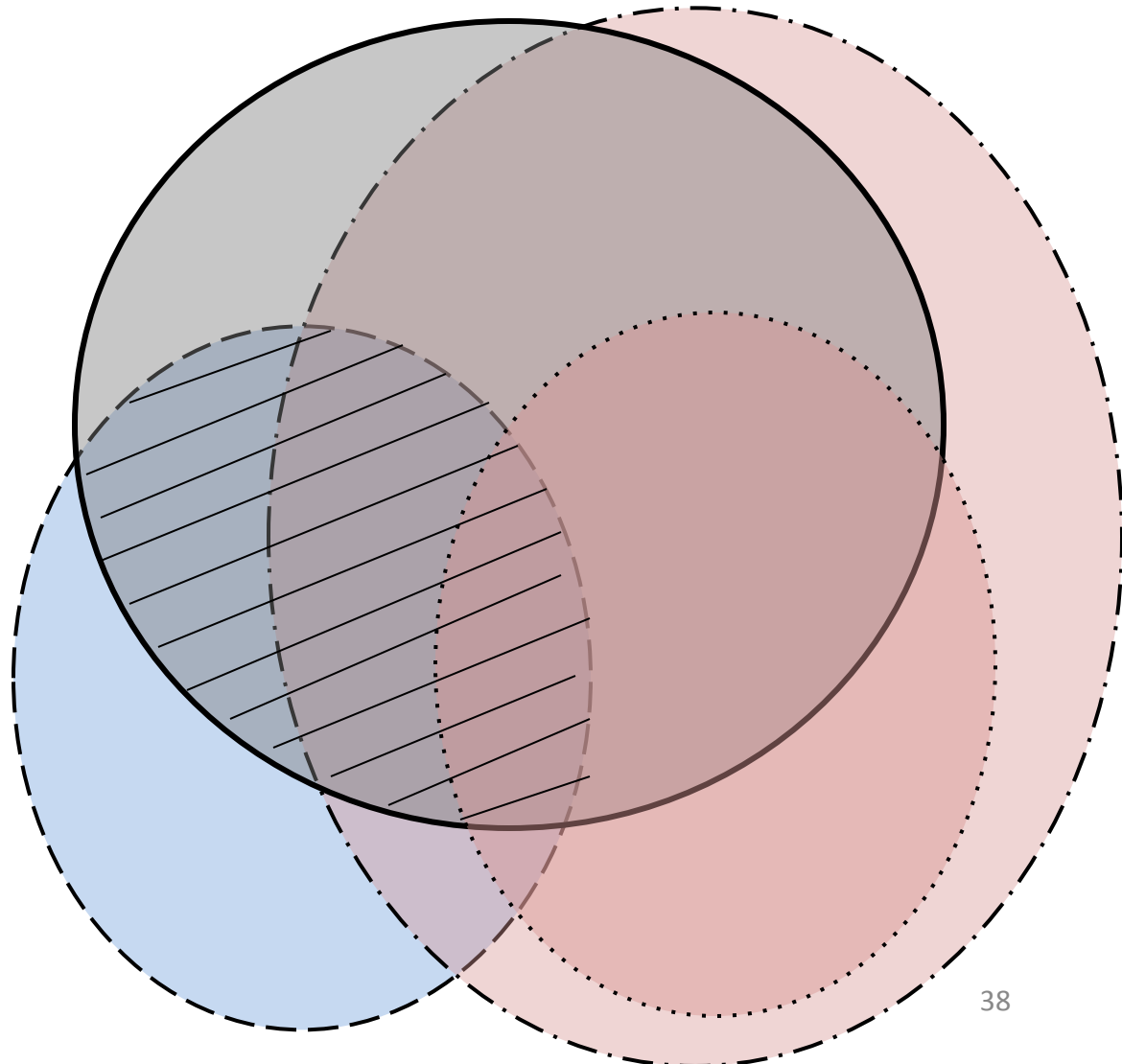


# An explanation for EGRBs:

## Making sense of category overlaps



The illusion of secondary control: overestimation of the extent to which certain *magical* personal actions increase the probability of winning in a game of chance

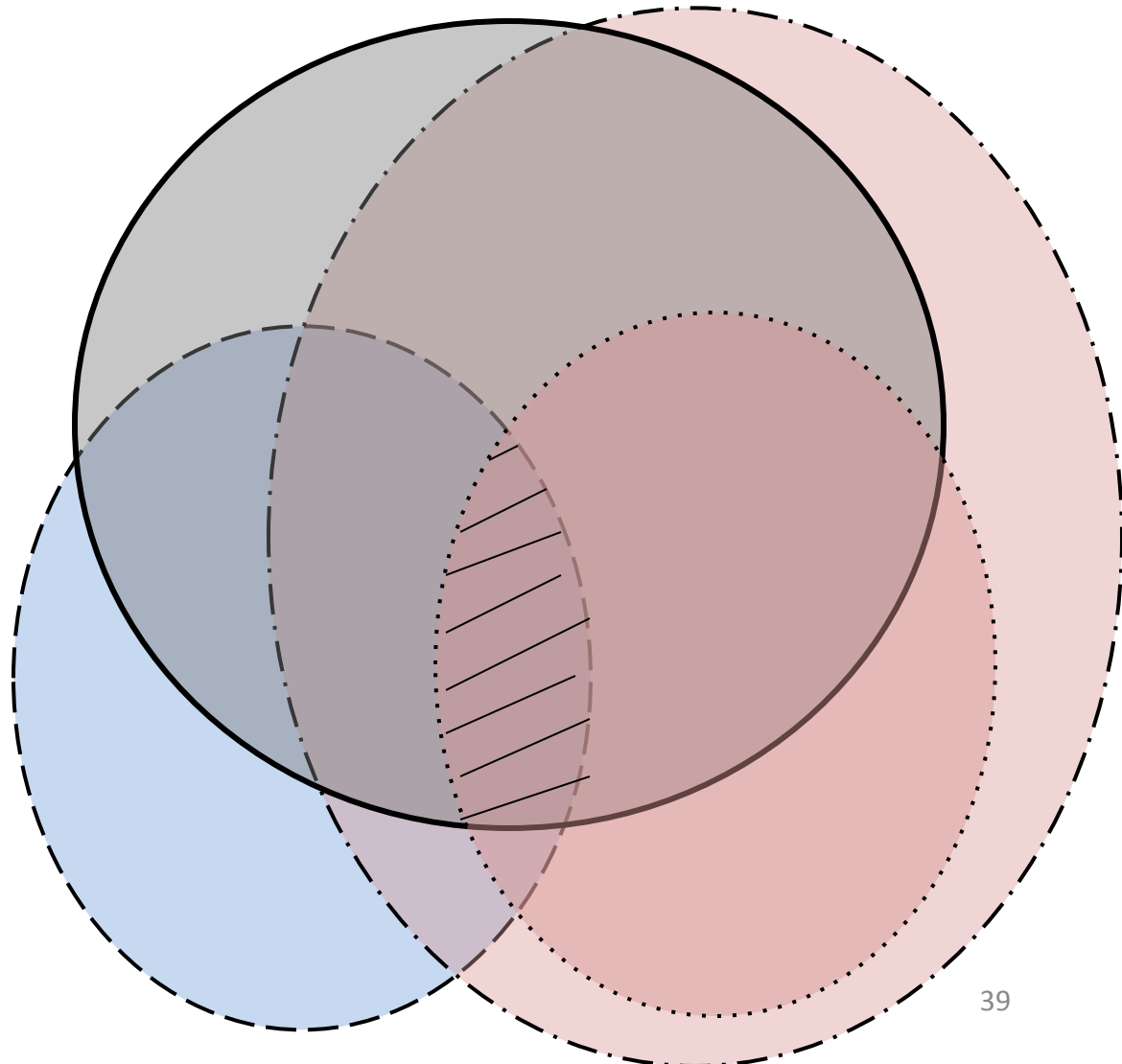


# An explanation for EGRBs:

## Making sense of category overlaps



The illusion of secondary control, additionally based on the gambler's fallacy – i.e., the belief that luck is cyclical, with associated beliefs about when and how to play.

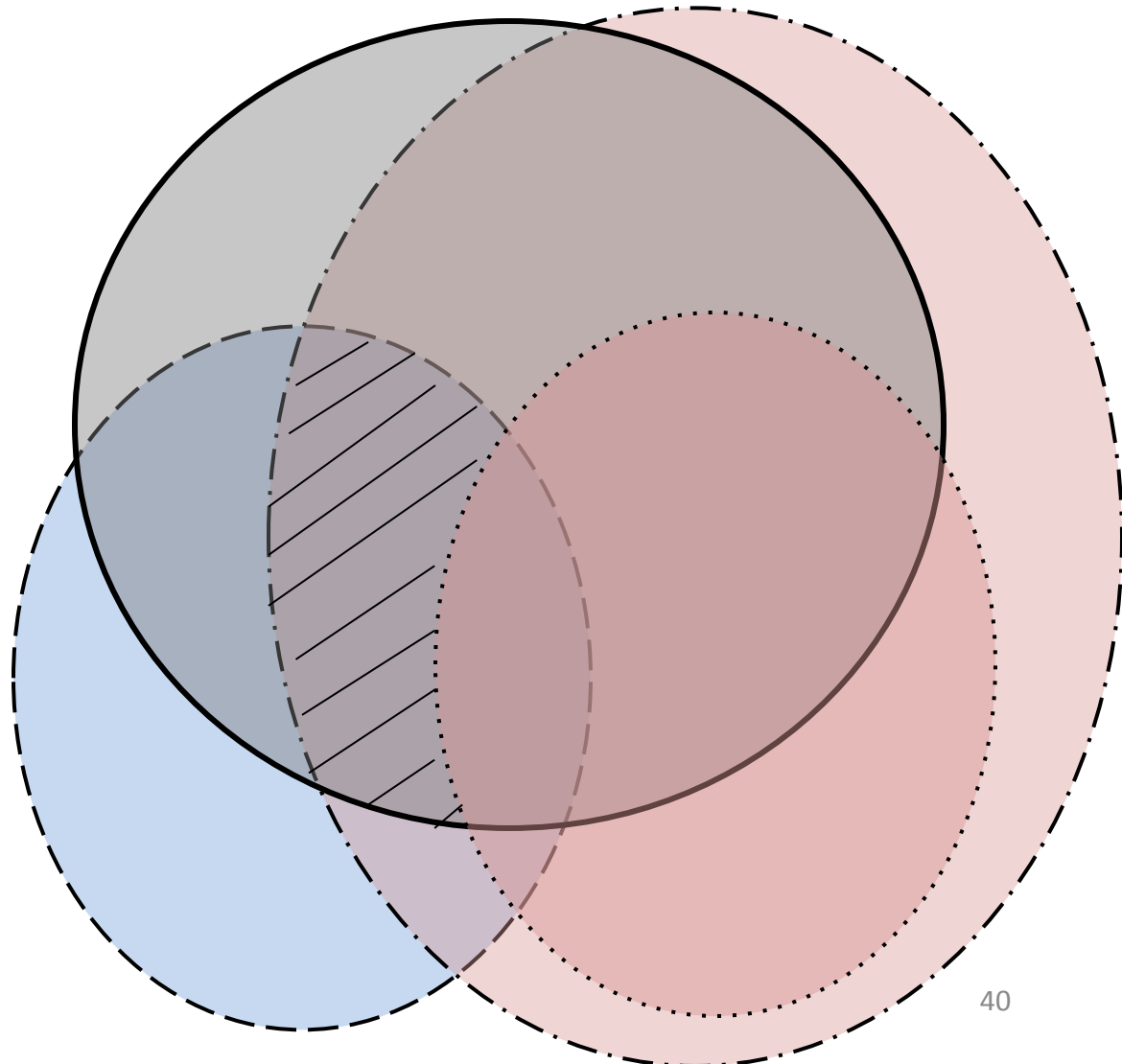


# An explanation for EGRBs:

## Making sense of category overlaps



The illusion of secondary control, based on theories of the physical world other than the gambler's fallacy – e.g., washing hands to change luck (Ohtsuka & Chan, 2010), 'cleaning' craps dice after dropping them (Henslin, 1967).



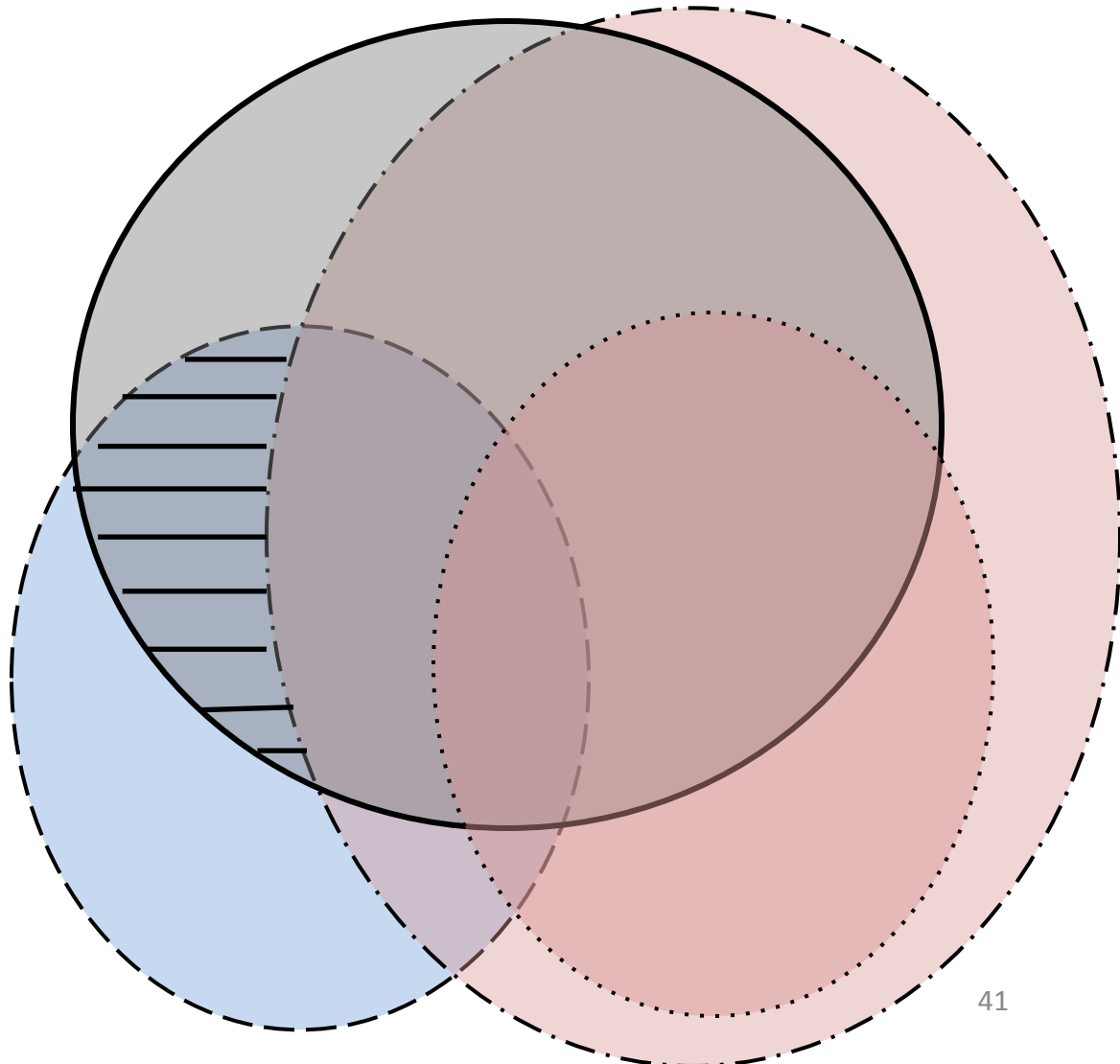


# An explanation for EGRBs:

## Making sense of category overlaps

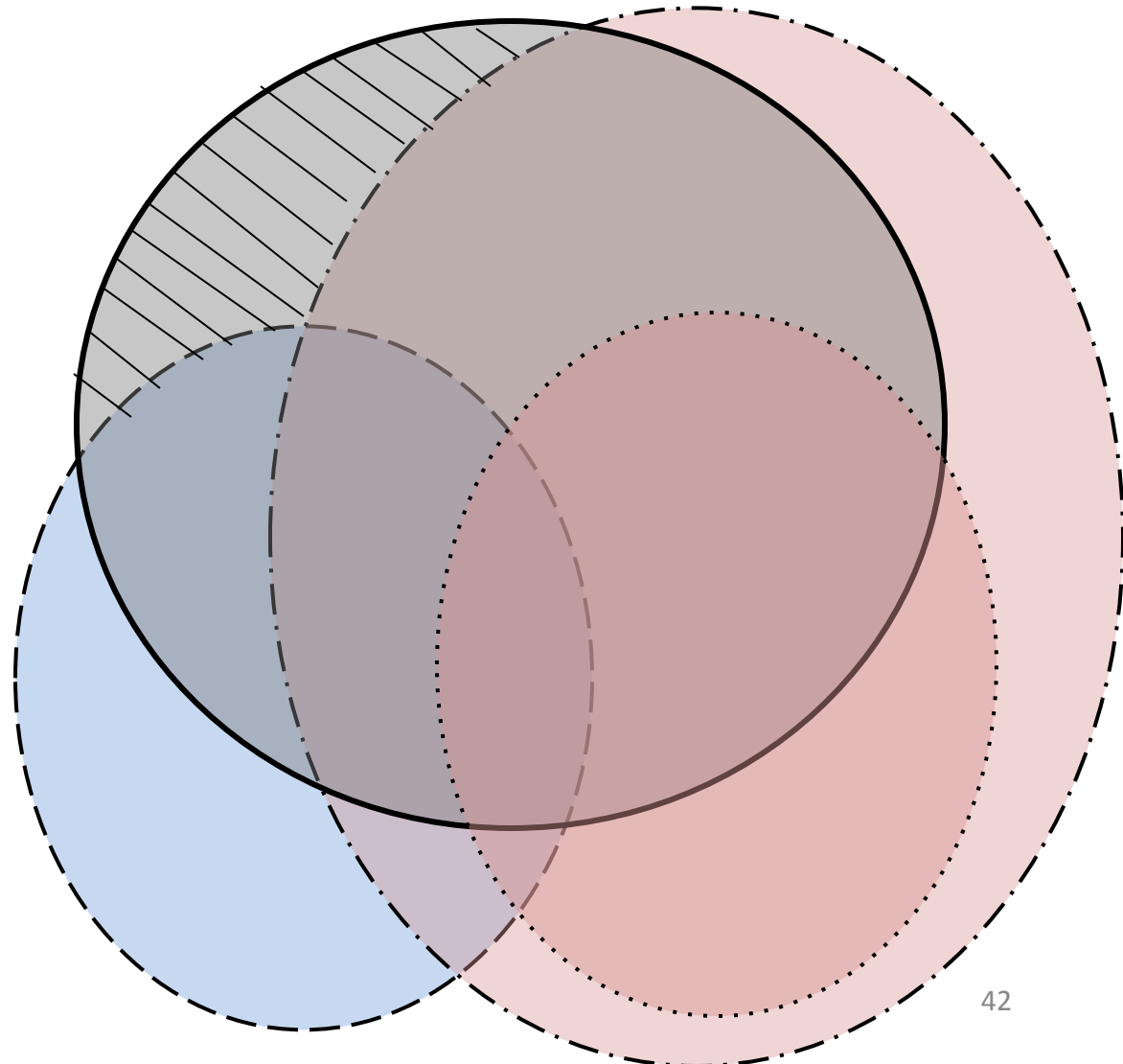


The illusion of secondary control, unrelated to beliefs about the physical world. E.g., Just World Belief – “Since my life has been hard, it’s about time for me to start winning” (Ohtsuka & Ohtsuka, 2010).



# An explanation for EGRBs:

## Making sense of category overlaps



EGRBs that do not represent action plans for achieving wins (i.e., EGRBs other than the illusion of control):

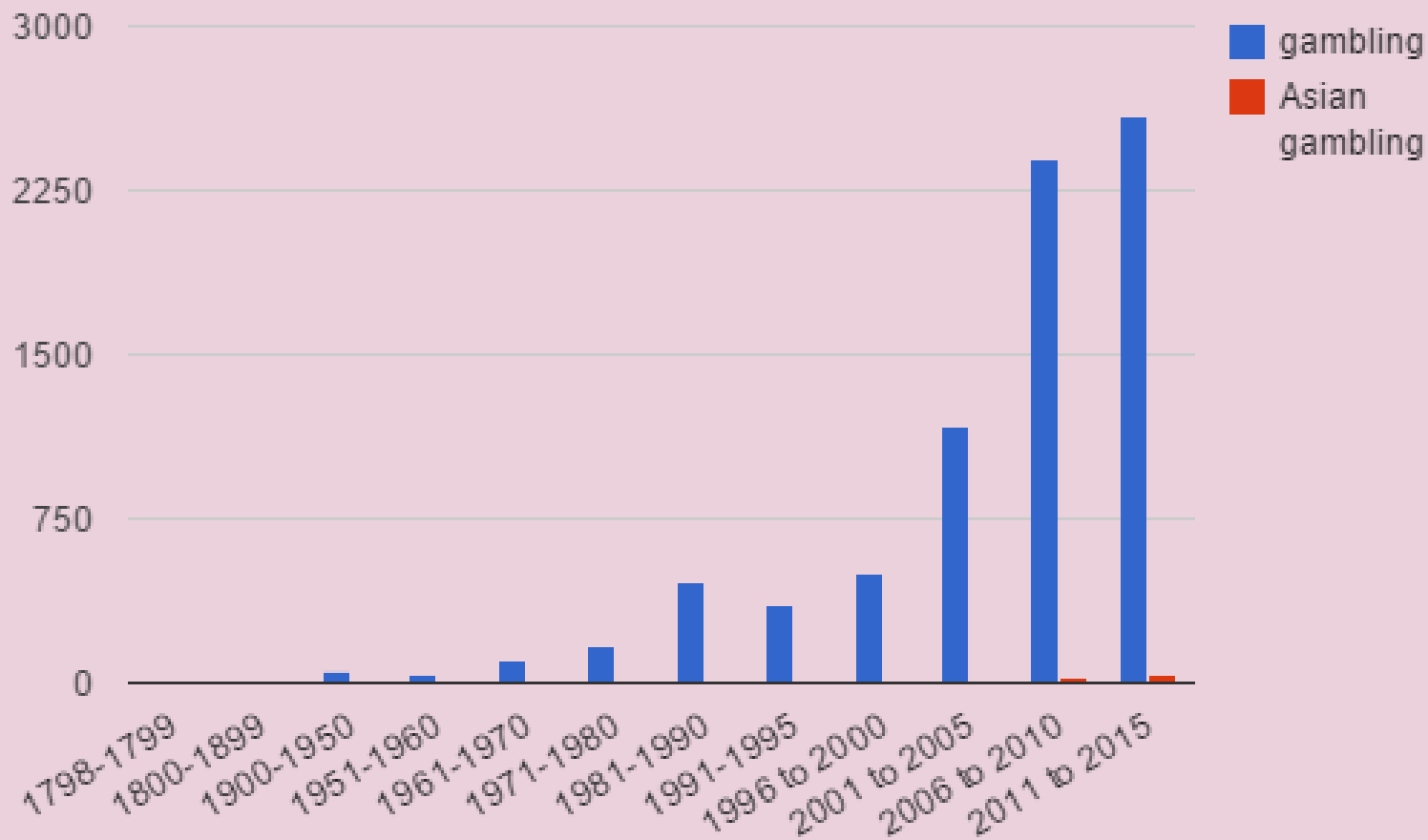
- Entrapment due to regret-based decision-making
- Optimism due to lack of knowledge about true win probabilities

i.e., belief that persistence and positive emotion will produce a gambling win

# Research output regarding Asian gambling

- Research has increased recent years but still constitutes a fraction of gambling research publications.
- PsychInfo keyword search “gambling” (1991-2015) - 7818 articles
- “Asian” & “gambling” => 70 articles
  - 0.89 % of total output

## Articles on Gambling and Asian Gambling by Year



- Asian Journal of Gambling Issues and Public Health ([www.ajgiph.com](http://www.ajgiph.com)) The first English language multidisciplinary research journal with Asia-Pacific focus
  - Published in 2010 Volume 1 from Hong Kong Academy of Medicine Press then as a SpringerOpen journal since 2013.
  - Peer-reviewed & Open Access - publications are available to general public.

# Recent Research Trends in AJGIPH

- Discipline

- Psychology
- Sociology/Social Work
- Public Health
- Policy analysis
- Case studies

- Region

- Australia, Canada, UK, & New Zealand
- China Hong Kong / Macau
- Korea, Japan, Malaysia

# Topics - psychological approach

- Vietnamese Australian gambling, CALD gambling in Australia
- mindfulness: PG treatment
- pathological gambling in Macau
- senior gambling in Hong Kong
- pathways model re: treatment seeking gamblers in Hong Kong
- Gambling recovery in Malaysia
- Gambling Related Cognition Scale (GRCS-J) - Japanese version.

# Sociology/Social work

- family violence
- partner and problem gambling
- indigenous gambling in Australia
  - gambling and crime
  - community leaders' views
- Web-based counselling for families
- HK Adolescent awareness re: PG
- HK Adolescents and parental gambling
- HK politicians awareness re: problem gambling
- Macau: Casino workers and stress
- Macau: Casino workers awareness re: problem gambling
- Public Health surveys: can CALD backgrounds predict problem gambling?
- Asian families in NZ and gambling



# Asian gambling in globalized world in 2015

- Globalization in ICT enabled world
  - Transnational human movement - explosion of cultural diversity within
  - Increase of international tourism
  - Increase of diverse client base
  - Global competition of commercial gaming
- New ICT and smartphone technology
  - social media
  - explosive growth of information quantity
  - speed of information propagation

# Asian gambling research: Future Directions

- Current emphasis on “East” Asian culture
  - E.g., Chinese concept of luck
- **Need for research** on:
  - Indian culture and gambling
  - Aboriginal gambling
    - *First Nation Gambling?*
  - CALD groups and gambling in the context of **acculturation process** post-migration migration
    - beyond comparing cross-cultural groups
    - contextual grounding of research
    - New technology and risk-taking behaviour
    - Positive psychology approach



Thank you!

# Links

Asian Journal of Gambling Issues and Public Health - [www.aigjph.com](http://www.aigjph.com)

Culin, S. (1891). The gambling games of the Chinese in America. Series in Philology Literature and Archaeology, Vol. I No.4, Publications of the University of Pennsylvania. Philadelphia: University of Pennsylvania Press.

<http://www.gamesmuseum.uwaterloo.ca/Archives/Culin/Gambling1891/index.html>

[Elliott Avedon Virtual Museum of Games](#), University of Waterloo, Ontario, Canada.

Fan Tan Alley [http://chinatown.library.uvic.ca/fan\\_tan\\_alley](http://chinatown.library.uvic.ca/fan_tan_alley)

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Smoley, R. (2009). *The dice game of Shiva: How consciousness creates the universe*. Novato, CA: New World Library.