

# Parent-Based Interventions in sensitive phases of life: Late Adolescence and Emerging Adulthood

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For more info: <http://bbh.hhdev.psu.edu/lab/prcasp/>



# Why Do Youth Drink?

## 1) Peer Influences

Baer, 1994

Bergen-Cico, 2000

Borsari & Carey, 2000

Corbin et al., 2011

Hawkins et al., 1992

LaBrie et al., 2007

Neighbors et al., 2004

Park et al., 2009

Read et al., 2005



## 2) Elevated Availability/Increased opportunities

Saltz et al. 1995-2008

Grube et al., 2000-2008



# Why Do Youth Drink?

## 3) Increased Willingness

Mallett et al. 2010



# Why Do Students Drink?

## 4) Reduced Social Controls

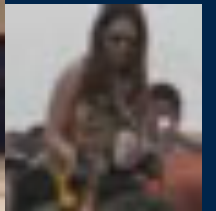
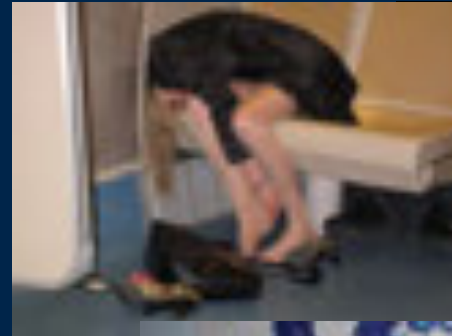
Abar et al., 2007-2009

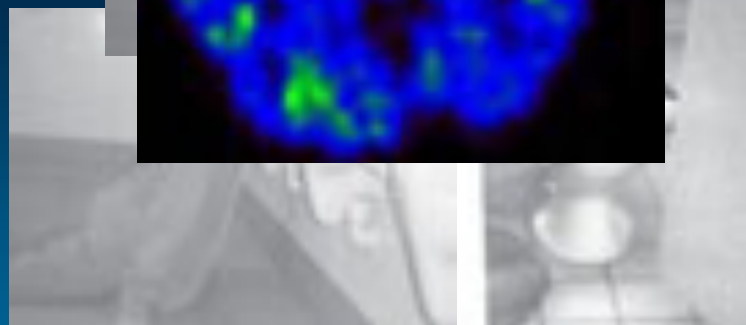
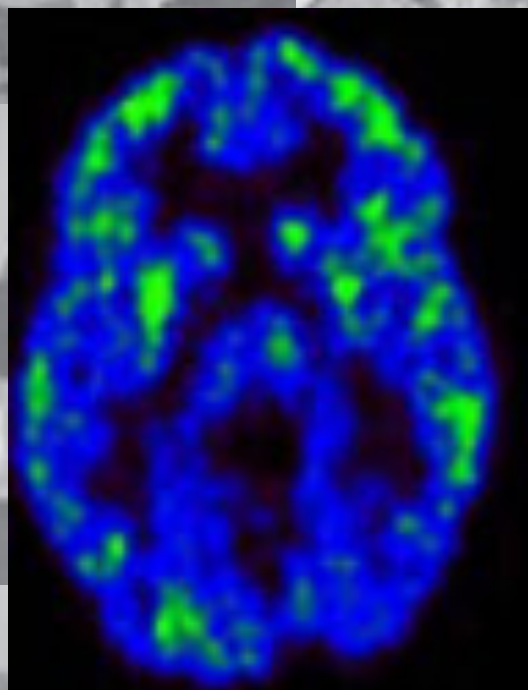
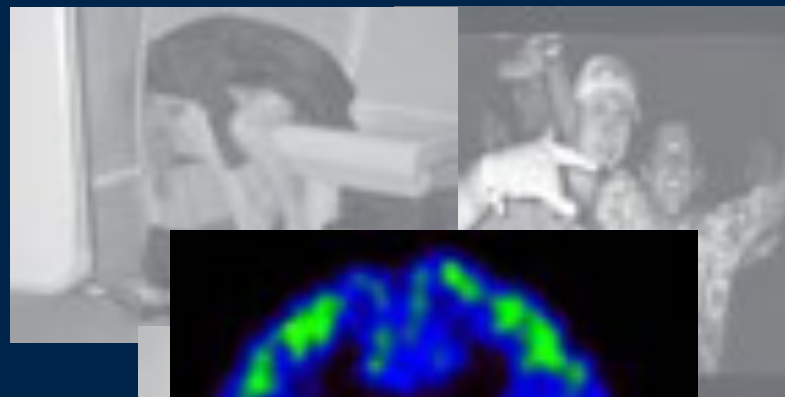
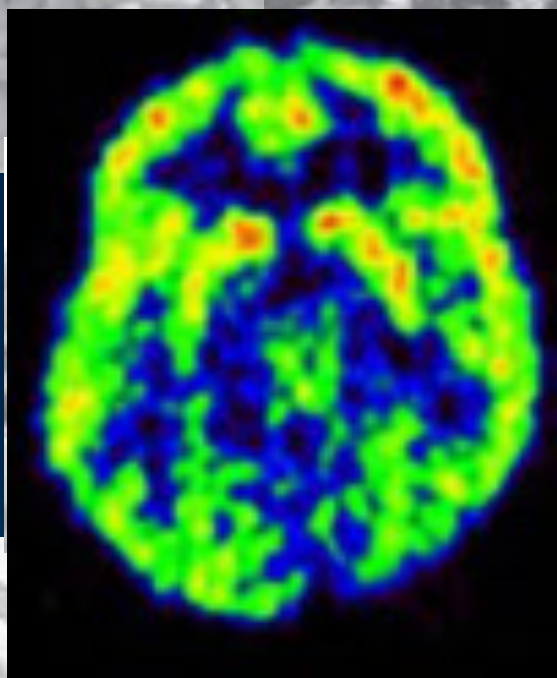
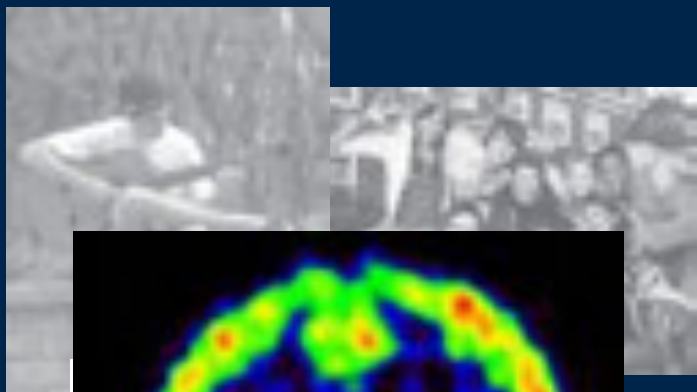
Chassin et al., 2004-2008

Turrisi et al., 2000-2010

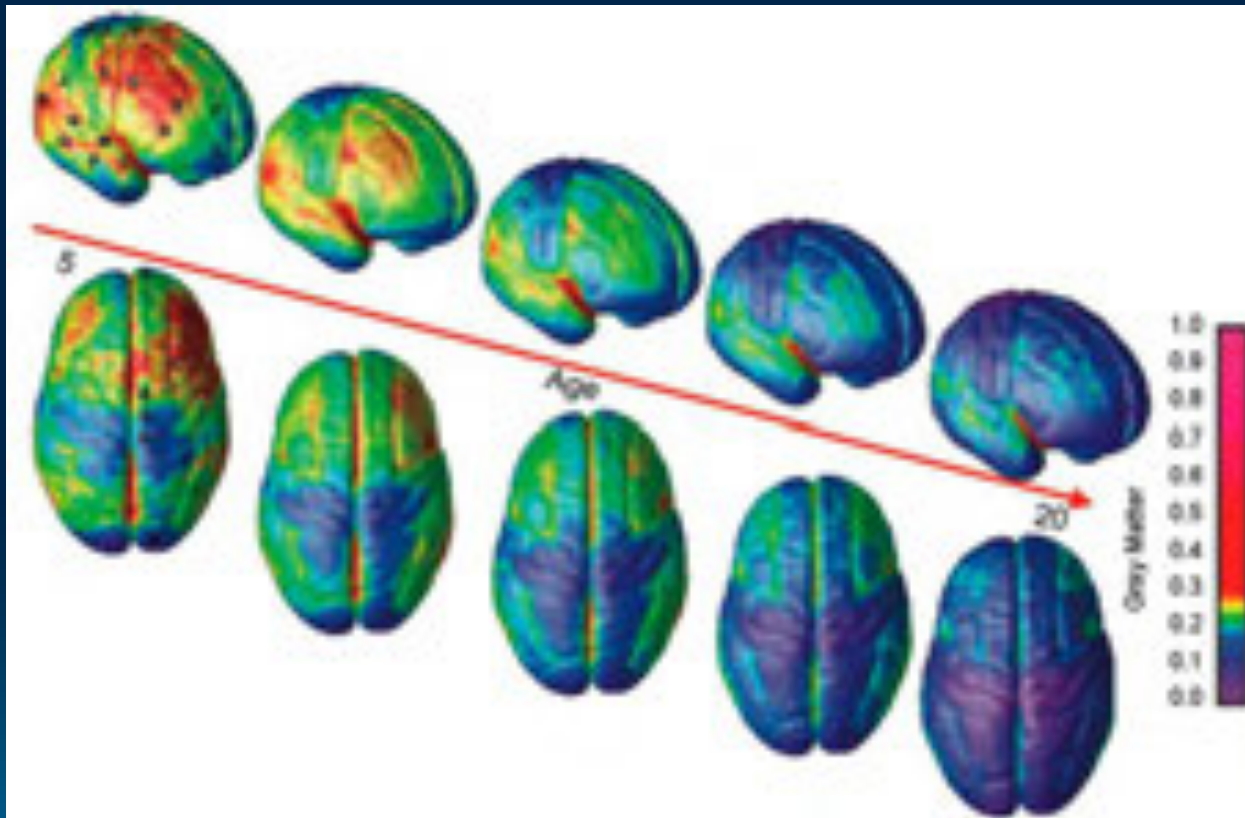
Patock-Peckham & Morgan-Lopez, 2007







# Brain Development & Self-Regulatory Behavior



Brain tissue changes in development, from 5 to 20 years old.

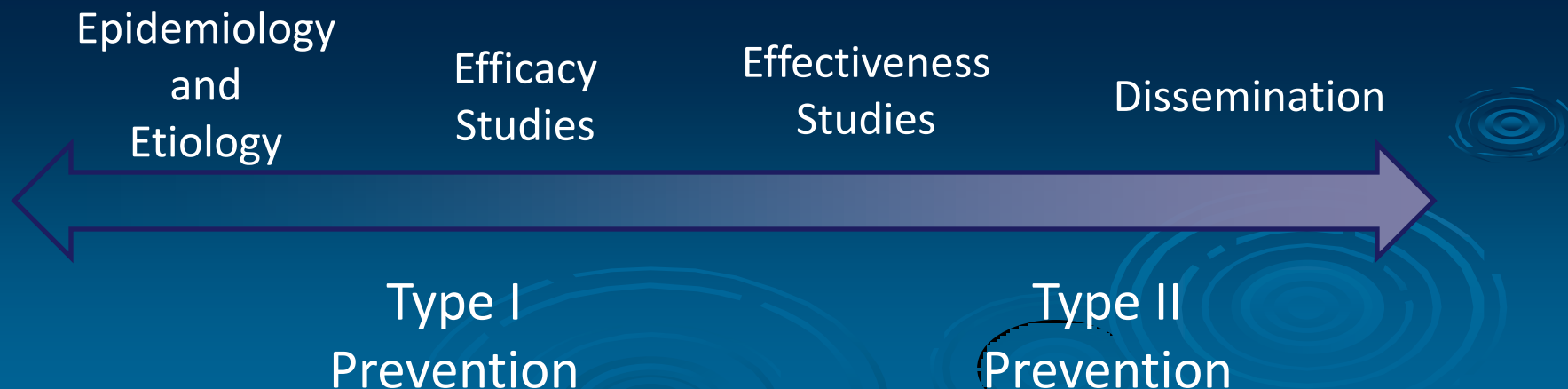
Red to purple imaging (decrease in gray matter) show the maturation of the brain.

# Stages of Prevention

Phase 1: Identifying and understanding the problem

Phase 2: Developing interventions efficacious in controlled studies

Phase 3: Effecting change on the population as a whole through effectiveness/dissemination



# Prevention Studies

General population

High-risk environment

High-risk sample

e.g.,

Turrisi et al., 2001

Turrisi et al., 2006

Ray et al., 2006

Ichiyama et al., 2009

Turrisi et al., 2009a

Testa et al., 2010

Turrisi et al., 2010

Doumas et al., 2013

Cleveland et al., 2013

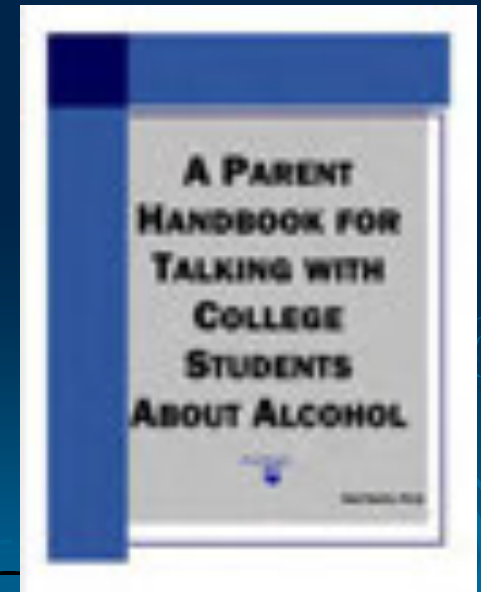
Turrisi et al., 2013

Varvil-Weld, et al., 2013



# Parent-Based Intervention

- Brief Intervention
- Target Audience - Typical Families
- Written Handbook
- Motivation, Knowledge & Skills
- Behavioral Decision Theory



# PBI: Talking About Alcohol

## Specific Components:

Parental Reluctance to Talk About Alcohol

How Alcohol Works in the Body

Physical & Psychological Effects

Setting Limits

Reasons Why Teens Drink

Reasons Why Teens Do Not Drink

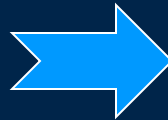
Binge Drinking: Drinking to Get Drunk

Did You Drink When You Were a Teen?

Warning Signs of a Potential Problem

Riding w/a Drunk Driver

Preventing a Friend From Driving Drunk



## Targeted Outcomes:

Attitudes toward Drinking Activities

Attitudes toward Non-Drinking Activities

Positive Expectancies

Perceptions of Enhanced Social Behavior

Normative Peer Approval

Negative Affect

Perceptions of Risk

Protective Behaviors

Health Motivation

Assertiveness

# Feedback We're Hearing

**52 yr old father of 18 yr old female**

"This information is of great value to a concerned parent. The communication techniques presented are excellent and very thorough."

"The 'Reacting to what you hear' section in the 'Improving Communication in General' chapter was excellent. Also, the Chapter 'Talking about Alcohol' is excellent for a parent who has not been talking about the effects of alcohol. Very good for parents who have a difficult time with communicating with their teen - this book helps with that (not just about issues with alcohol)."

**45 yr old mother of 18 yr old female**

"Thank you for allowing me to participate. I found all of the material very useful and informative. Thanks for sending me a clean copy to share with a friend who has a teen who is currently facing several of these issues; I believe this handbook will help that mom a great deal."

**55 yr old female of 18 yr old male**

**41 yr old mother of 18 yr old female**

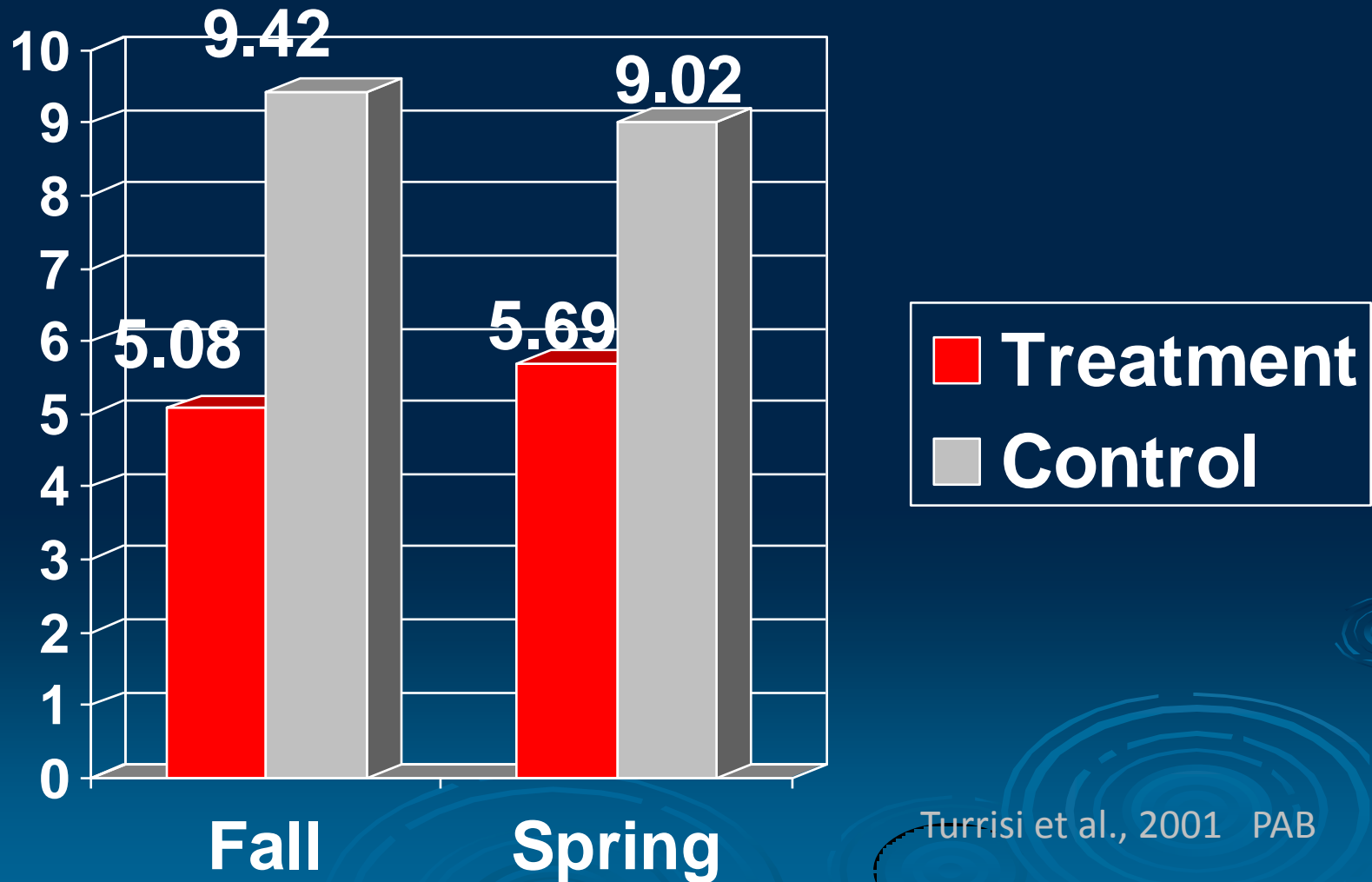
"There were many good points in each section of the handbook. I found it easy to relate to the 'parent and teen responses' section. This handbook has brought up issues that I hadn't thought of before. Overall I found this handbook to be extremely useful."

# Efficacy and Effectiveness Trials

- Will parents implement an intervention, and will it work?  
(Turrisi et al. 2001 *PAB*)
- Will PBI change culture in a high risk environment?  
(Ray et al., 2006 *RSA*)
- Will PBI affect transitions between drinking groups?  
(Ichiyama et al., 2009 *JSAD*)
- Will PBI decrease incidence of sexual consequences?  
(Testa et al., 2010 *PS*)
- Do combined interventions work for high risk groups?  
(Turrisi et al., 2009 *JSAD*)
- Does timing/dosage affect intervention effectiveness?  
(Turrisi et al., 2013)

# Weekend Drinking (DDQ)

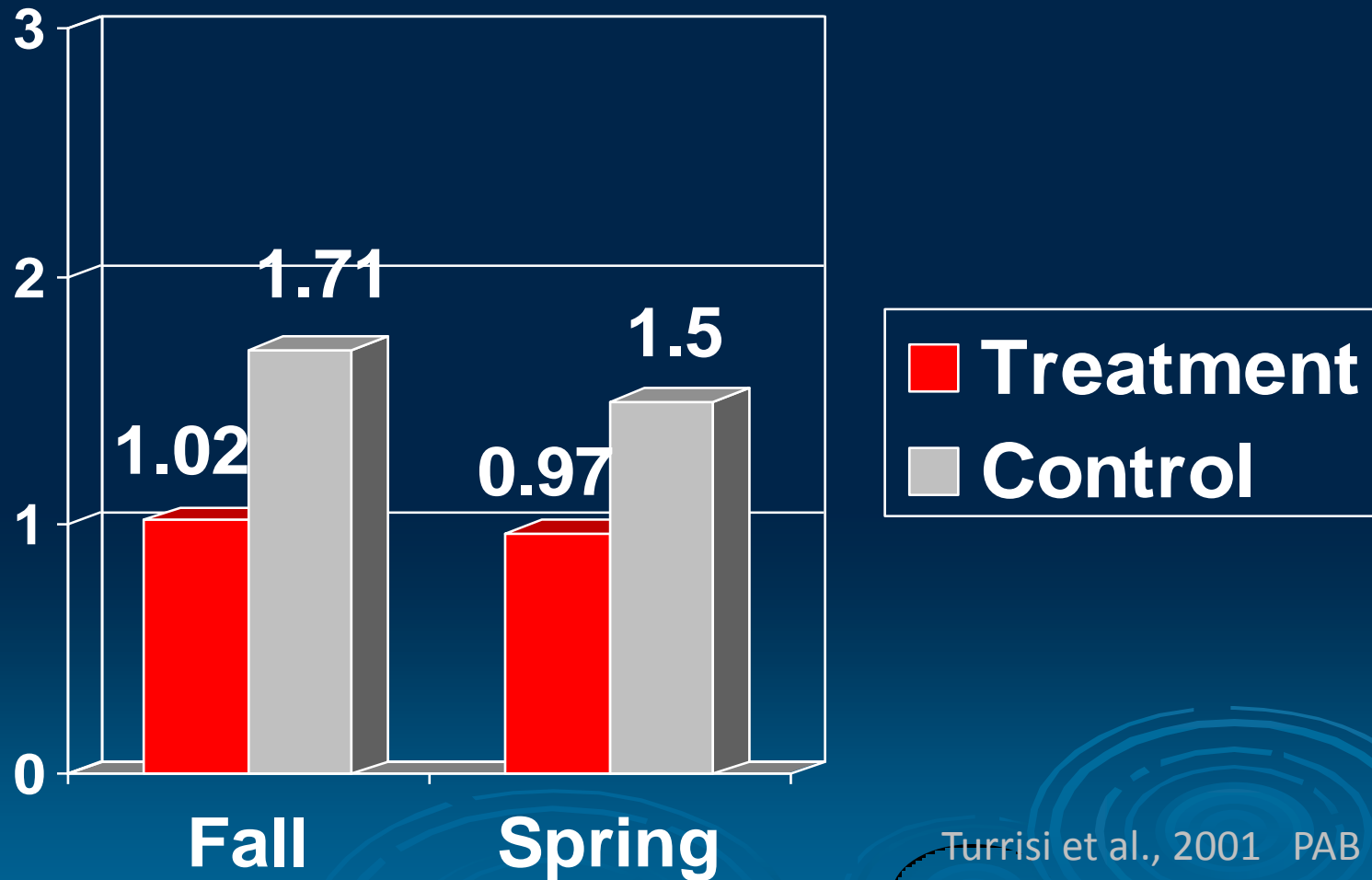
Group F (1, 888) = 36.16 Interaction F (1, 888) = .63



Turrisi et al., 2001 PAB

# Heavy Episodic Drinking

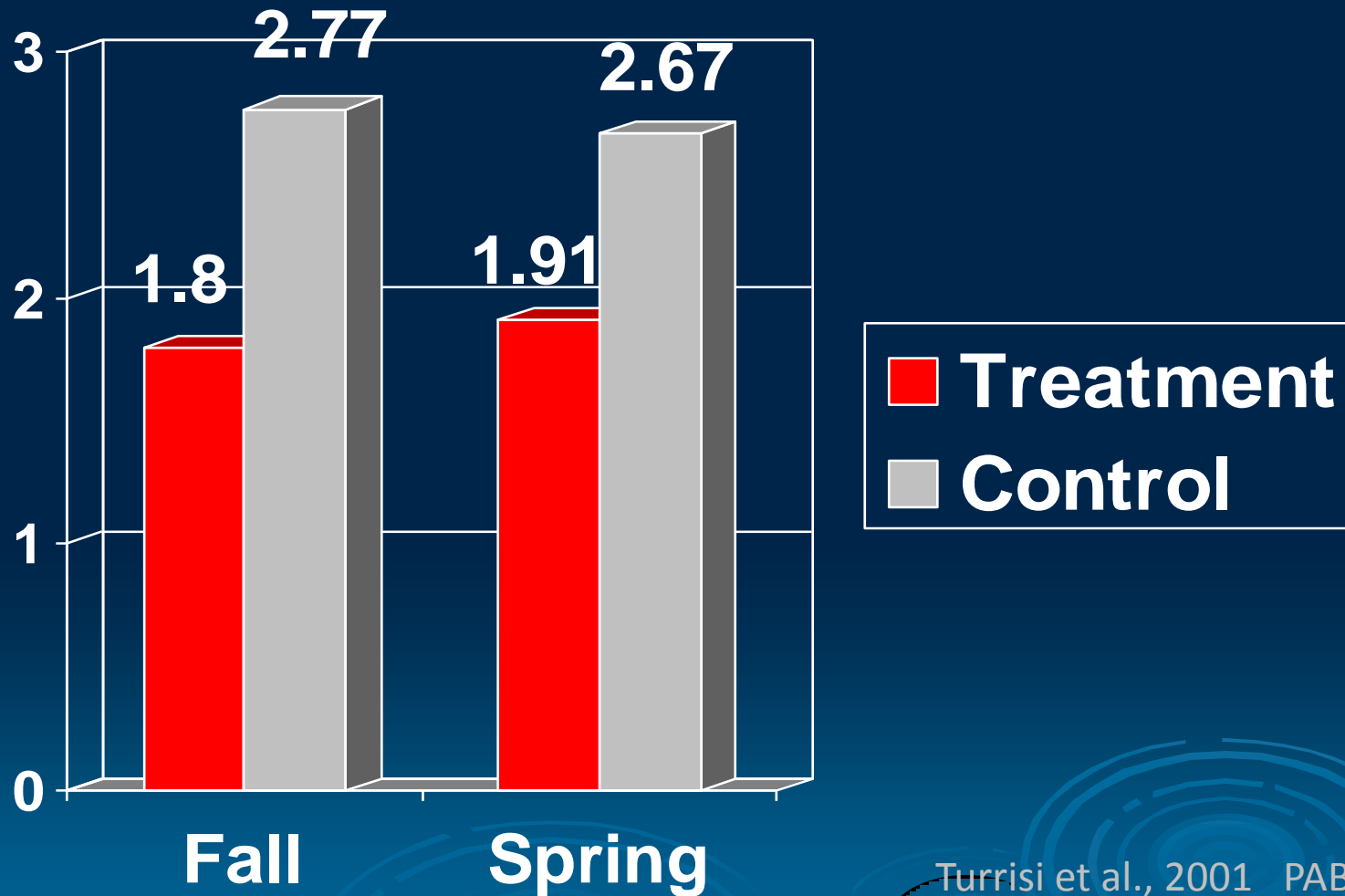
Group F (1, 888) = 17.51 Interaction F (1, 888) = .50



Turrissi et al., 2001 PAB

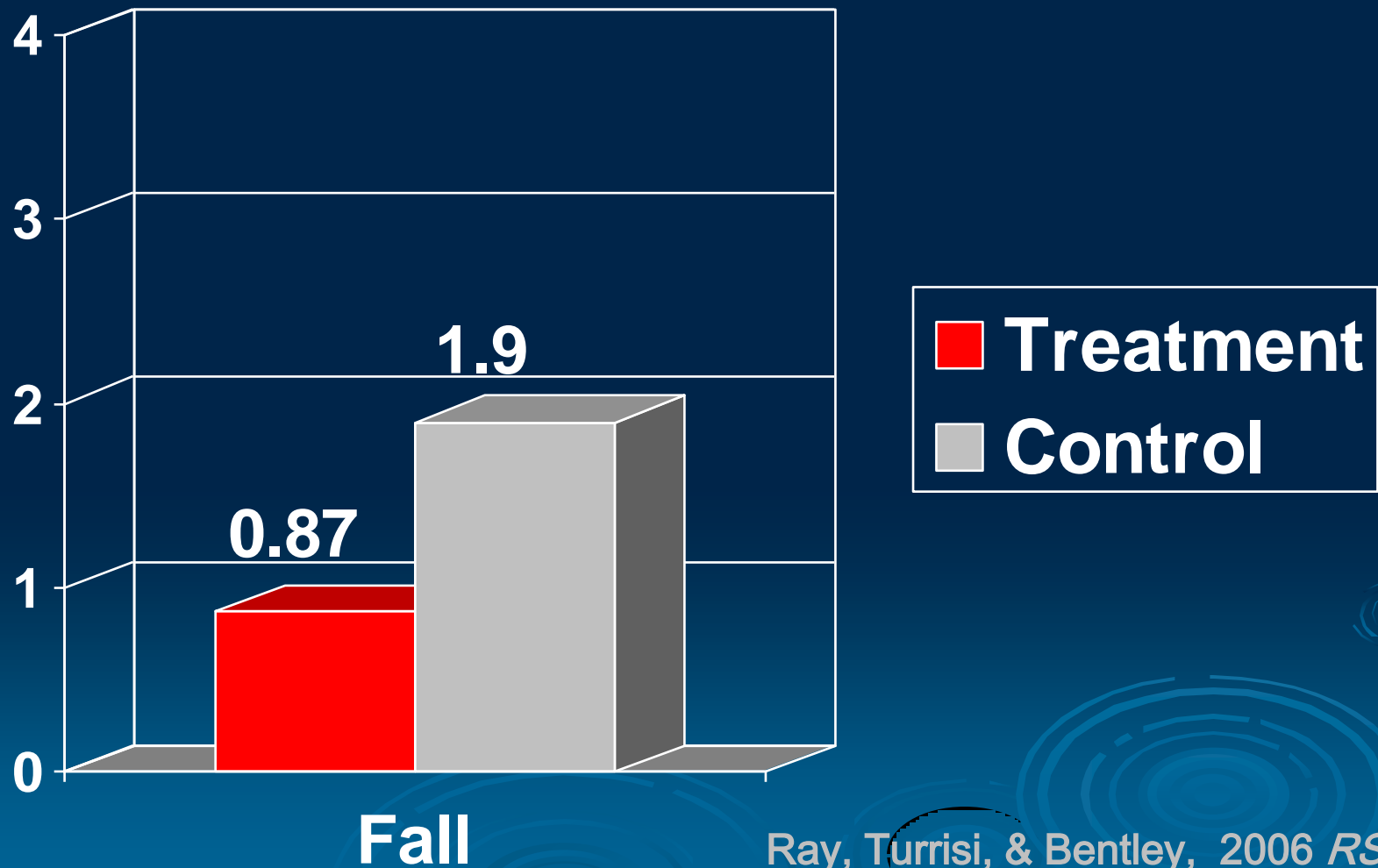
# Smoked

Group F (1, 899) = 53.91 Interaction F (1, 899) = .82

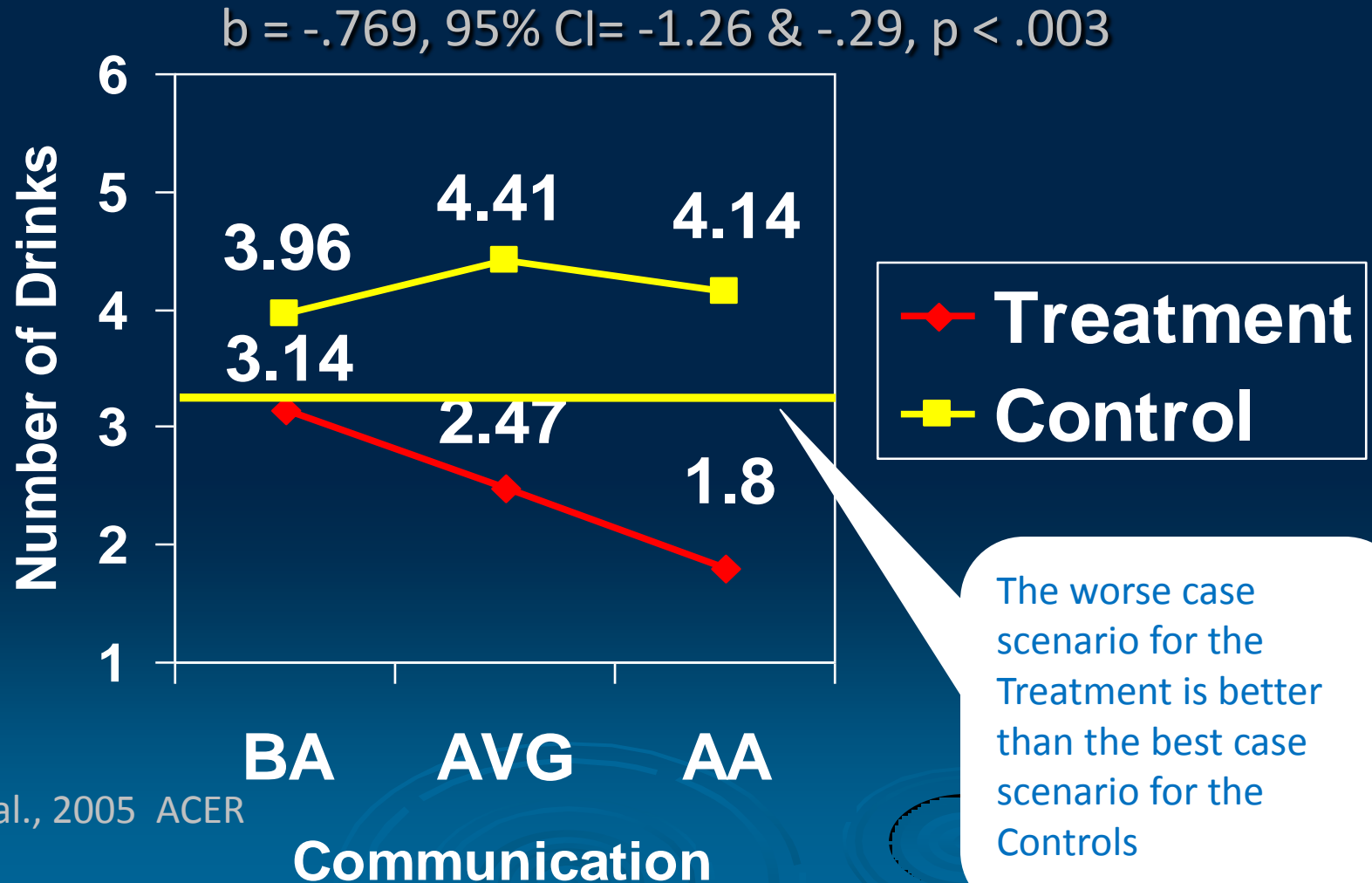


Turrisi et al., 2001 PAB

# High Risk: Heavy Episodic Drinking (2 Week Period)



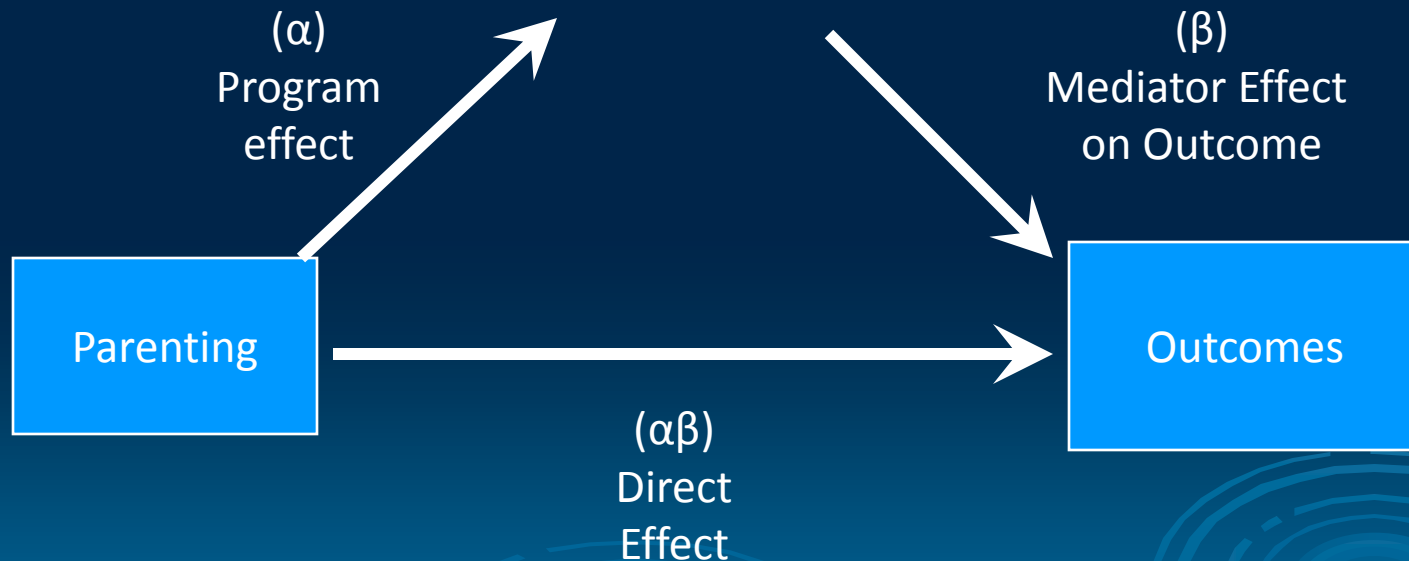
# Positive Communication: DDQ Saturday



# Why Does it Work?

Proxies for the immediate target variable and the self regulation brain change—the connection is getting stronger

Attitudes toward Drinking Activities  
Attitudes toward Non-drinking Alternatives  
Positive Transformations  
Enhance Social Behaviors  
Normative Approval  
Negative Affect  
Health Orientation





Turrise et al., 2010 JASP

# Is it Effective at Changing Risk Profiles?

Turrisi et al., 2013 JSAD


## Project ACT

### ➤ Different Profiles

Sun	Mon	Tue	Wed	Thur	Fri	Sat
						

≠

### ➤ Simply counting the number of drinks does not paint the whole picture

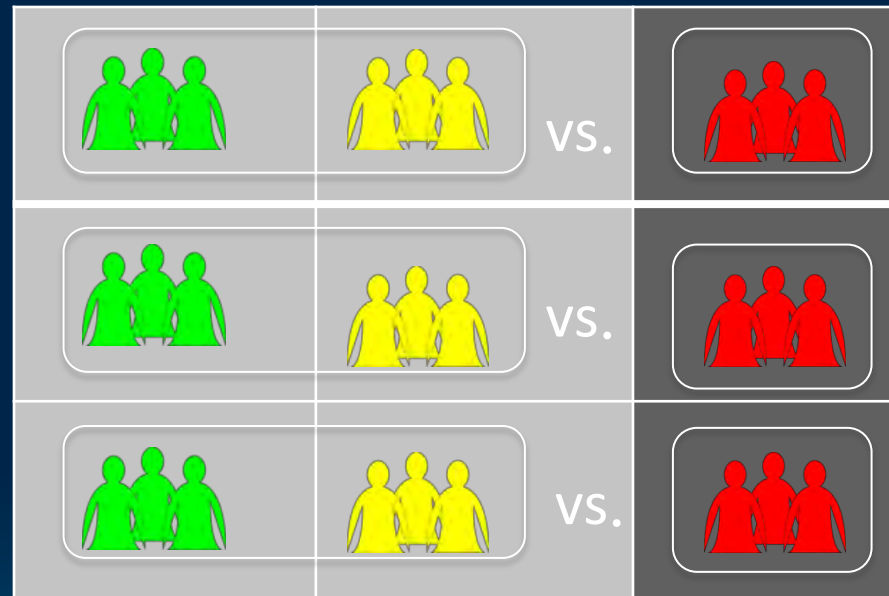
Sun	Mon	Tue	Wed	Thur	Fri	Sat
						     

# Identify Different Types of Profiles

	Non-Drinker	Weekend Non-Binger	Weekend Binger	Heavy Drinker
Past Month Drink	0.10	0.99	1.00	1.00
Past Month Drunk	0.00	0.53	0.99	1.00
2-Week Binge	0.00	0.10	0.83	0.95
BAC > 0.08	0.00		0.89	0.94
Weekday	0.00	0.05	0.08	0.30
Thursday	0.00		0.02	0.74
Weekend	0.02	0.65	0.88	0.98

# Is it Effective at Changing Risk Profiles?

Turrisi et al., 2013 JSAD



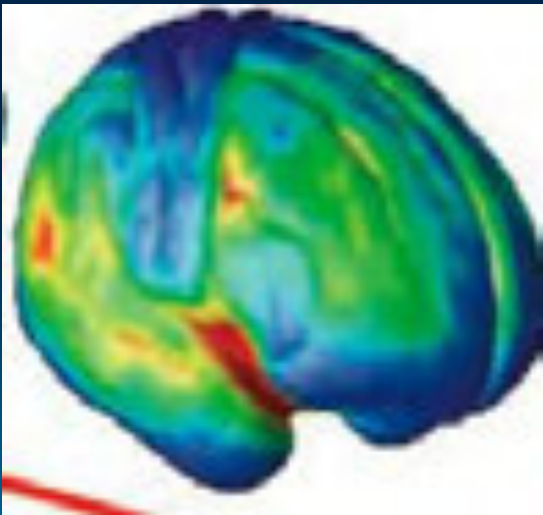
**Long term:**

- High risk (heavy drinker) transitioned out of profile
- Weekend binge transitioned out of profile

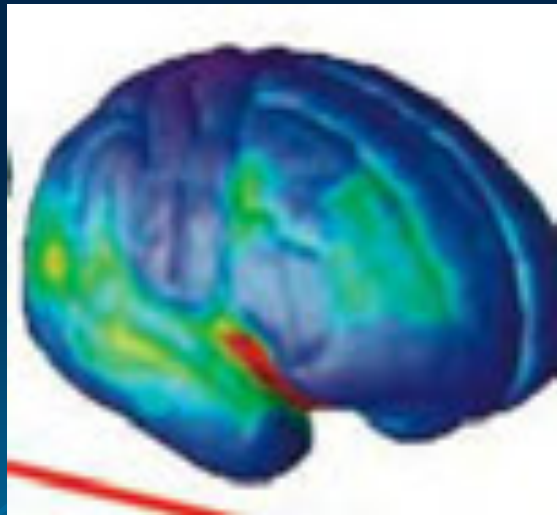
# Evidence

- Evidence from changes in a wide array of high risk behaviors suggests that parenting is having an effect on self-regulatory behavior!

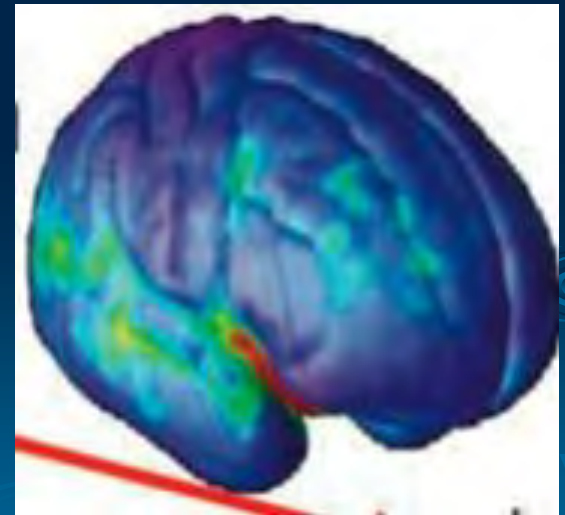
~Age 13



~Age 17

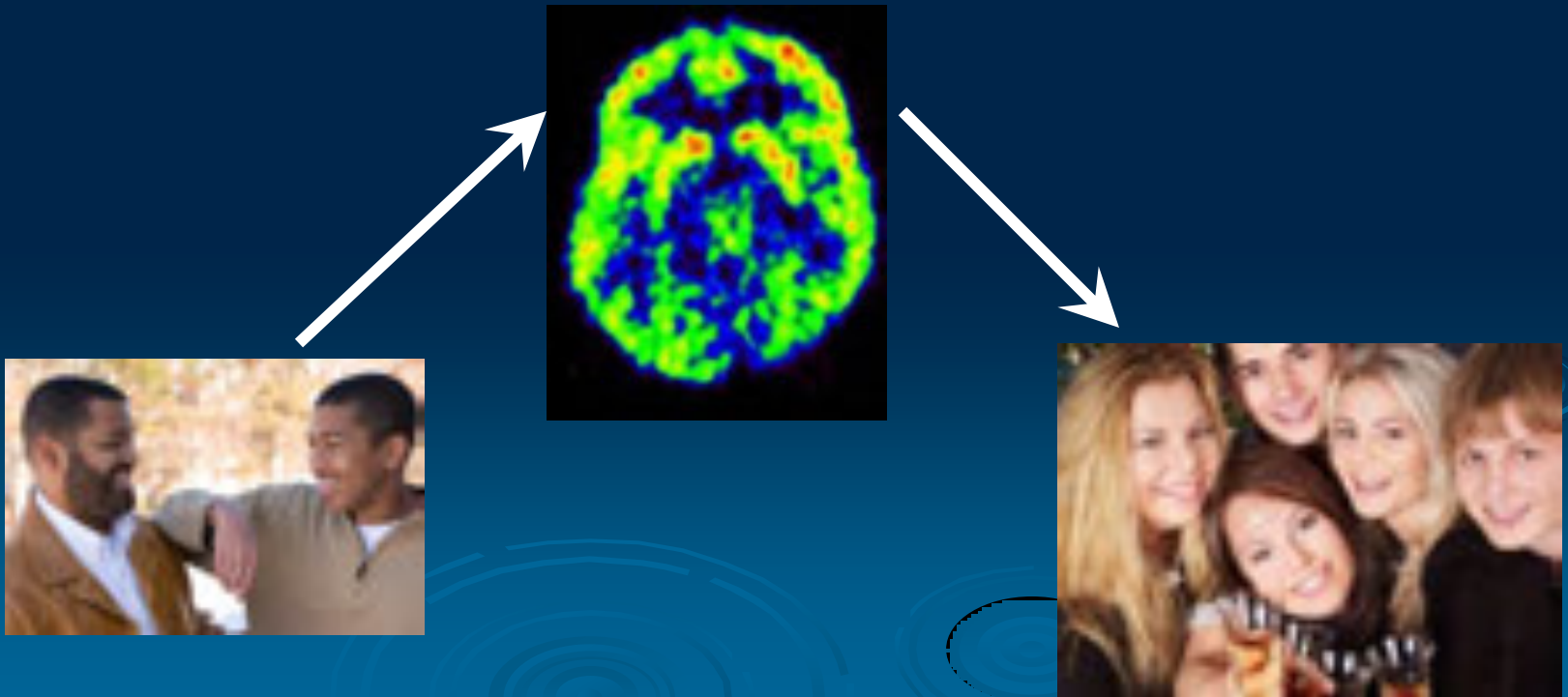


~Age 20



# Summary

- PBI Multiple well controlled trials
- Parents make a difference by influencing changes to their children's brains which in turn result in self-regulatory behaviors and less problematic outcomes.



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