

New Zealand Prospective Research: The Pacific Islands Families Study, Treatment Outcome Study and National Gambling Study

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Professor Max Abbott
max.abbott@aut.ac.nz

PVC and Dean, Faculty of Health & Environmental Sciences
Co-director, National Institute for Public Health and Mental Health Research
Director, Gambling and Addictions Research Centre
Auckland University of Technology

Prevalence Studies

- ✿ Cross sectional and retrospective
- ✿ Assess current participation and problems
- ✿ Provide an indication of lifetime participation and problems
- ✿ Information on distribution, and potential risk/protective factors
- ✿ Additional information – eg. help-seeking
- ✿ Frequently methodologically compromised
- ✿ Limitations re. temporal sequence, causal inference, risk/protective factors for problem onset and progression
- ✿ Prevalence study ‘replications’ assess change over time (snapshots at population level)

Prospective Studies

- ✿ Provide a temporal perspective
- ✿ Assess change/stability at cohort and individual trajectory levels
- ✿ Determination of incidence requires large-scale prospective studies
- ✿ General population incidence studies rare in mental health/addictions
- ✿ Provide estimates of problem onset – inflow (and cessation/outflow)
- ✿ Potential to identify risk/protective factors for problem onset (cross sectional studies include both new and extant disorders)

Prospective Studies

Have additional strengths including:

- ✿ Reduced recall error
- ✿ Stronger causal inferences

However

- ✿ Expensive
- ✿ Design sensitive to attrition and missing data points
- ✿ Changes in definitions/diagnoses/ measurement over time
- ✿ Long time to generate useful data
- ✿ Administrative challenges – staff attrition/funding

Prospective Studies

Abbott & Volberg (1996, 1999)

Concluded major weakness in gambling research is heavy reliance on cross sectional correlation studies and lack of field research employing prospective, experimental and quasi-experimental designs. Also called for greater use of qualitative methodologies.

Taken up by Shaffer et al (2004)

“The road not (yet) taken.”

Abbott & Clarke (2007) – review

“While few in number, recent in execution and typically methodologically compromised, findings from these studies significantly challenge core assumptions about the nature, development and measurement of problem gambling and raise important questions for future research.”

“The potential (of prospective research) is profound – to serve as both catalyst and vehicle to move the field from its rather disjointed preoccupation with description and distribution to become a theory driven, cumulative science of problem gambling determinants and consequences.”

Prospective Studies

- ✿ Approximately 25 published gambling studies
- ✿ No jurisdiction-wide incidence studies
- ✿ Mostly non-representative small/moderate samples
- ✿ Various methodological problems including high attrition
- ✿ Psychological focus
- ✿ Large-scale general population studies underway in Sweden, Canada, Victoria and New Zealand

New Zealand Studies

Add-ons

- Pacific Island Families (PIF) Study
- Dunedin Multidisciplinary Health and Development Study

Gambling Studies

- National Gambling Study (NGS)
- Treatment Outcome Study

Pacific Island Families Study

- ✿ An ongoing longitudinal study
- ✿ Tracks the health and development of 1,398 Pacific children born in South Auckland in 2000 and their families
- ✿ Collects data through structured interviews and other means
- ✿ Quantitative methodology
- ✿ 'Life course' approach

Aims

- ✿ Determine optimum pathways for children and families during critical developmental periods
- ✿ Identify risk and resilience factors that influence positive and negative outcomes
- ✿ Provide Pacific-specific evidence
- ✿ Make empirically-based strategic recommendations to improve the health and well-being of Pacific children and families and address social disparities



What is investigated?

- Demographics
- Child development
- Child behaviour
- Peer relationships
- Child and family health
- Family finances
- Cultural aspects
- Partner relationships
- Parenting and home environment
- School and community environment



PIF Supplementary Studies

- ✿ OME at 2 years
- ✿ Gambling (6 & 9 years)
- ✿ Nutrition and body size (4, 6 and 9 years)
- ✿ Physical activity (6 years)
- ✿ Traffic & indoor air pollution (9 years)
- ✿ Oral health (9 years)
- ✿ Hearing (11 years)

- ✿ Core funding from the Foundation for Research, Science and Technology and the Health Research Council
- ✿ HRC Programme grant for 5-year *Transition through Adolescence* phase at 14 and 16 years (pending)



Who are the researchers?

Back left-right:

Fa'asisila Savila

Leon Iusitini

Dr El-Shadan Tautolo

Nick Garrett

Steve Taylor

Prof. Philip Schluter

Dr. Gerhard Sundborn

Front:

Shamshad Karatela

Amor Hirao

Prof. Janis Paterson

Absent:

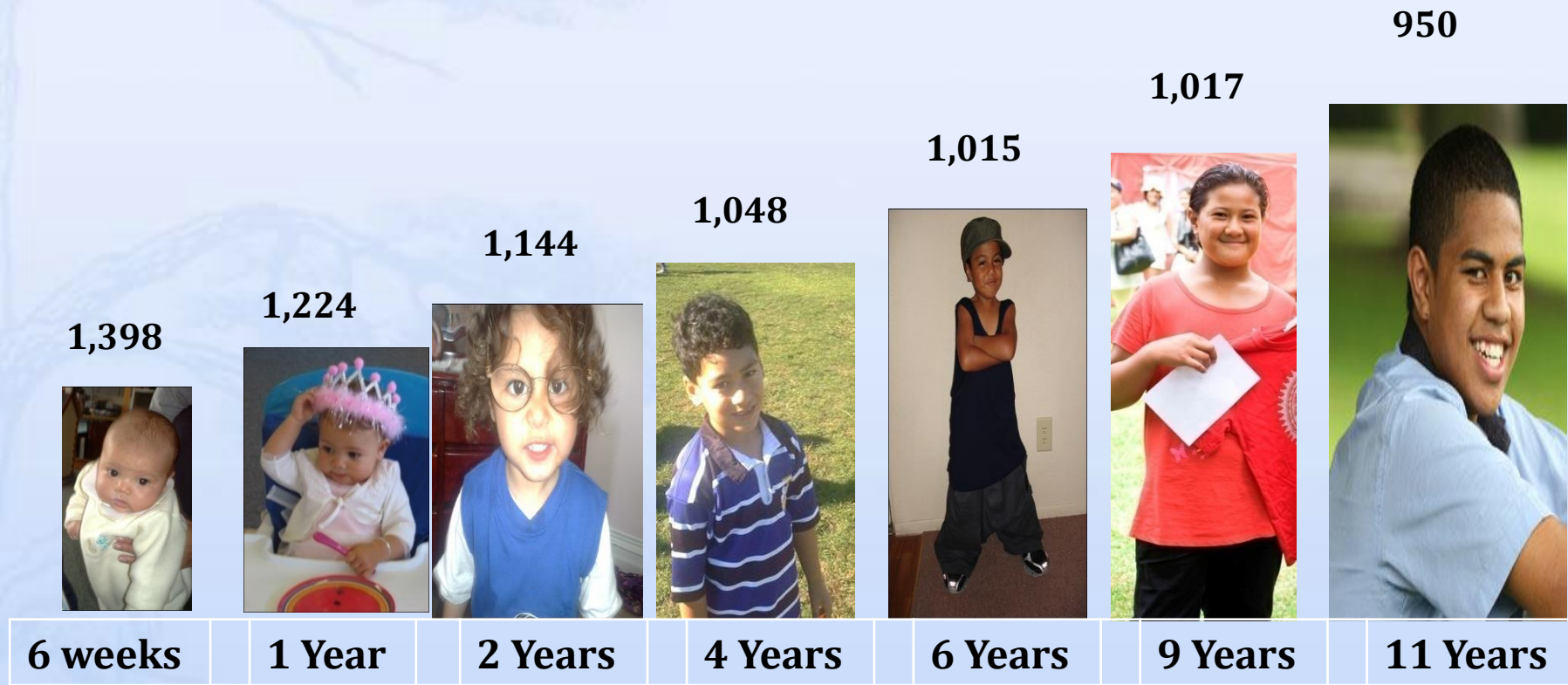
Prof. Max Abbott

Dr. Melody Oliver

Upasana Jhagroo



Phases of PIF Study



PIF Family Fun Day 2011



Saturday 5th February 2011
AUT Manukau Campus

Special guests:
Tofiga

(from The Laughing Samoans)

Logan Swann

(former rugby player – Warriors)



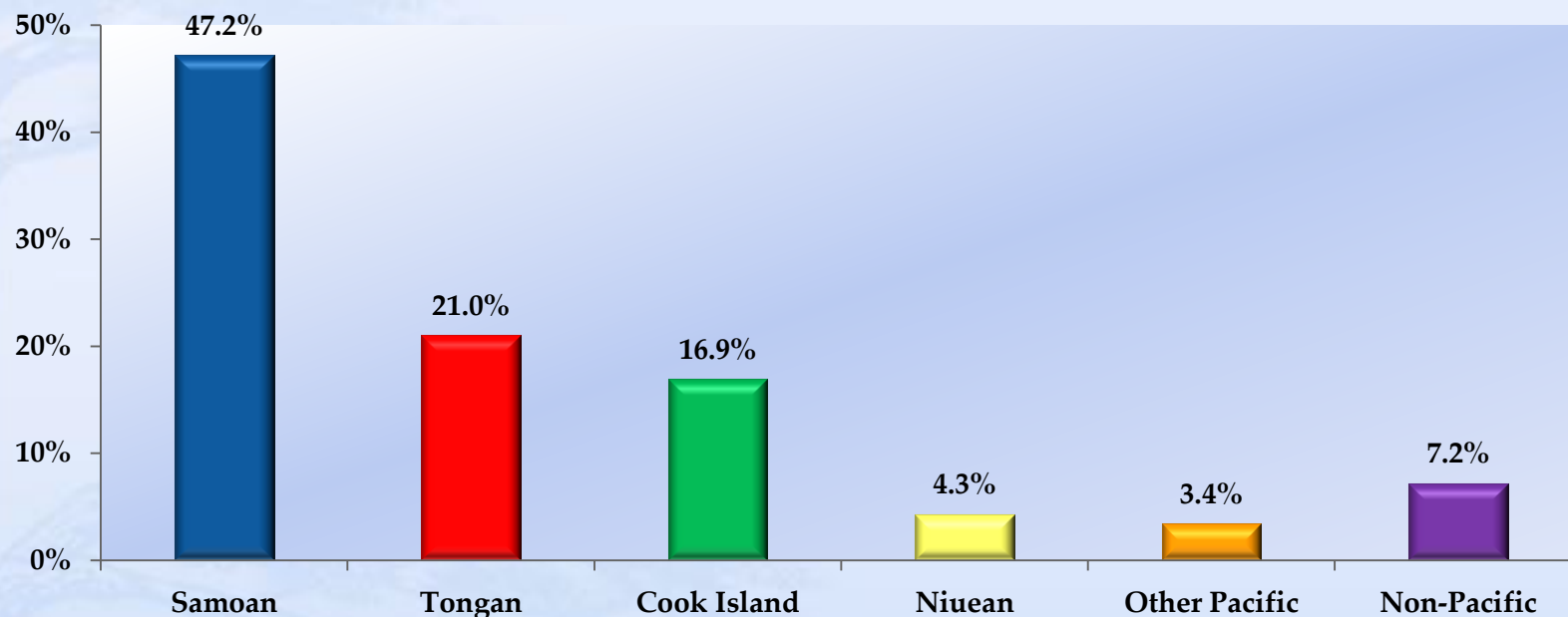
Who participates and when?

- ✱ Participants selected at birth where at least one parent identified as being of a Pacific ethnicity and was a NZ permanent resident

	Mother	Child	Father	Teacher
6 weeks	*	*		
1 year	*	*	*	
2 years	*	*	*	
4 years	*	*		
6 years	*	*	*	*
9 years	*		*	*
11 years	*	*	*	*

93% of eligible mothers consented and interviewed at 6 weeks.

Demographics of maternal cohort



Mean age: **27 years**

NZ-born: **33%**

Married or de facto couples: **81%**

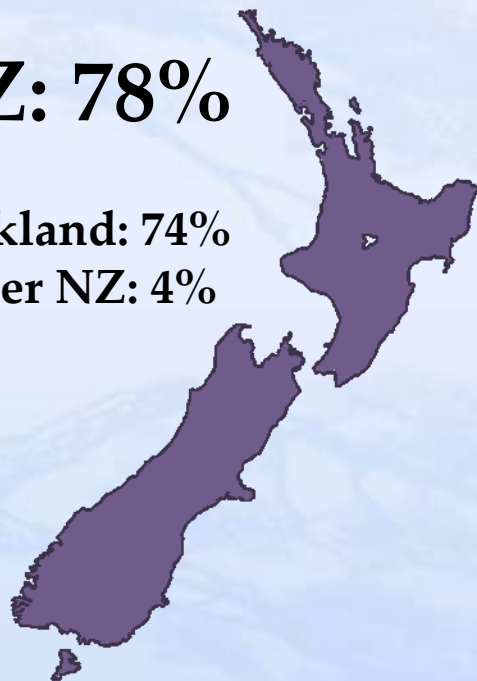
Post-school qualifications: **27%**

Where does the cohort live?

NZ: 78%

Auckland: 74%

Other NZ: 4%



Australia: 16%



Rest of world: 2%

Where can I get further information?

www.aut-pif.ac.nz



2006 Selected Gambling Data for Mothers and Fathers

- * Bimodal gambling distribution
- * 36% mothers; 30% fathers gambled
- * Smoking and alcohol consumption linked
- * Ethnic differences in gambling participation for mothers but not fathers
- * Tongan mothers lower participation but those who gambled 2.4x odds of being at risk/problem gambler
- * Cultural orientation related to gambling

- ✿ 4% of mothers and 10% of fathers reported problems because of someone else's gambling
- ✿ Gambling and problem gambling associated with psychological distress
- ✿ Gambling associated with being perpetrator and victim of verbal aggression (fathers)
- ✿ At risk/problem gambling associated with physical violence (fathers)
- ✿ For mothers, risk/problem gamblers less likely to perpetrate violence

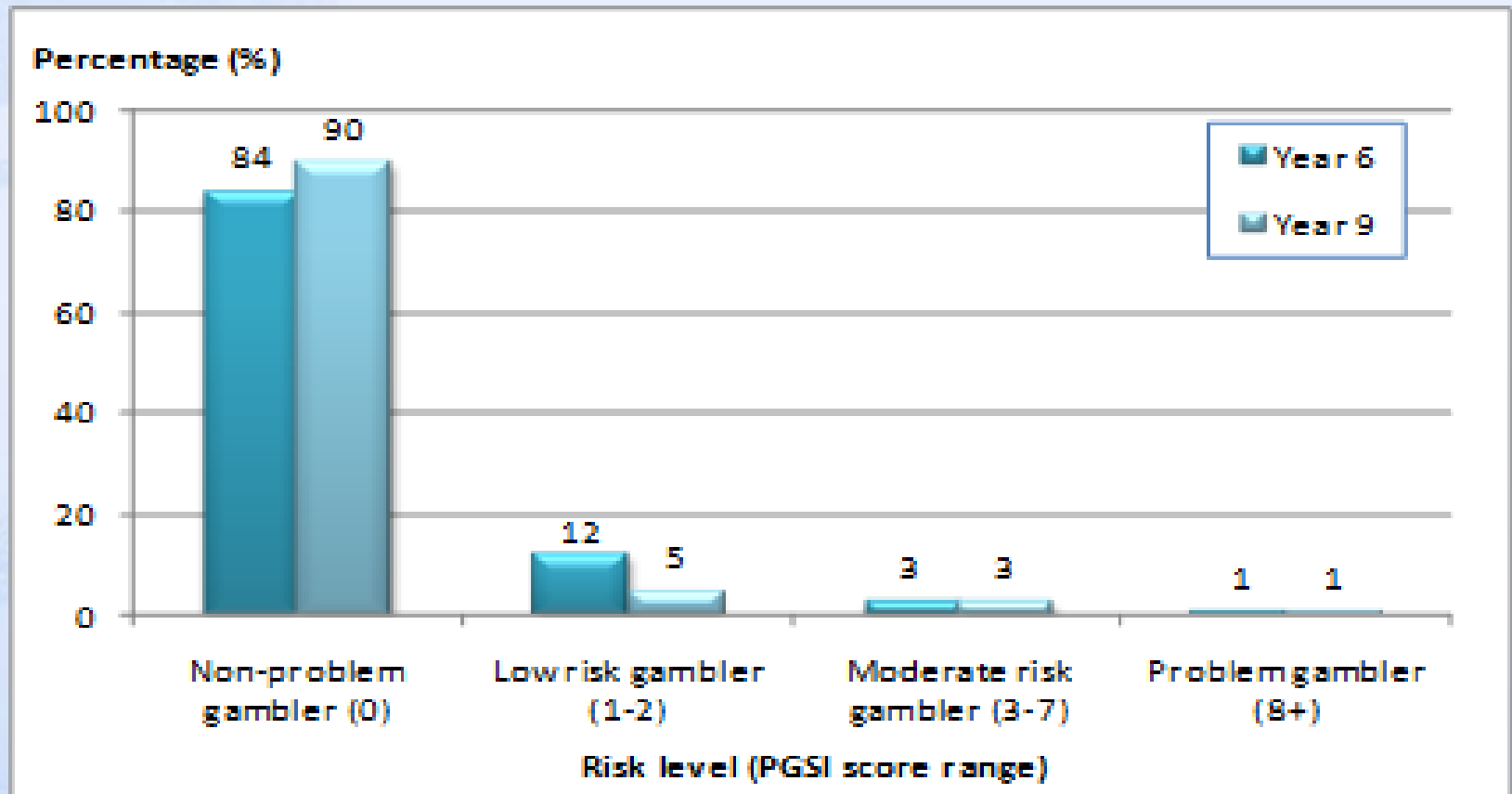


2009 Selected Gambling Findings for Mothers and Changes 2006-2009

Results

- * N=1,001 Year 6, N=957 Year 9
- * Gambling prevalence ↑
 - * 36% Year 6
 - * 50% Year 9
 - * 199 non-gamblers Year 6 = gamblers Year 9
 - * 90 gamblers Year 6 = non-gamblers Year 9

Mothers - Distribution of PGSI scores in Years 6 and 9



Mothers - Gambling classification in Years 6 and 9

		Year 9 (N)				
		Non-gambler	Non-problem gambler	Low risk gambler	Moderate risk gambler	Problem gambler
Year 6 (N)	Non-gambler	312	154	9	9	1
	Non-problem gambler	61	118	6	2	2
	Low risk gambler	11	14	1	0	0
	Moderate risk gambler	2	3	1	1	0
	Problem gambler	1	3	0	0	0

N=711, missing data either due to participant not being seen at both time points or by PGSI questions being unanswered

Results: Potential Risk Factors

- ✱ Prior gambling associated with continued gambling (OR 4.4)
- ✱ Worsening financial situation associated with gambling (OR 2)
- ✱ Mild deprivation level and smoking also associated with higher odds for gambling
- ✱ At least one life event associated with higher expenditure (\geq \$40/month)

Results: Potential Protective Factors

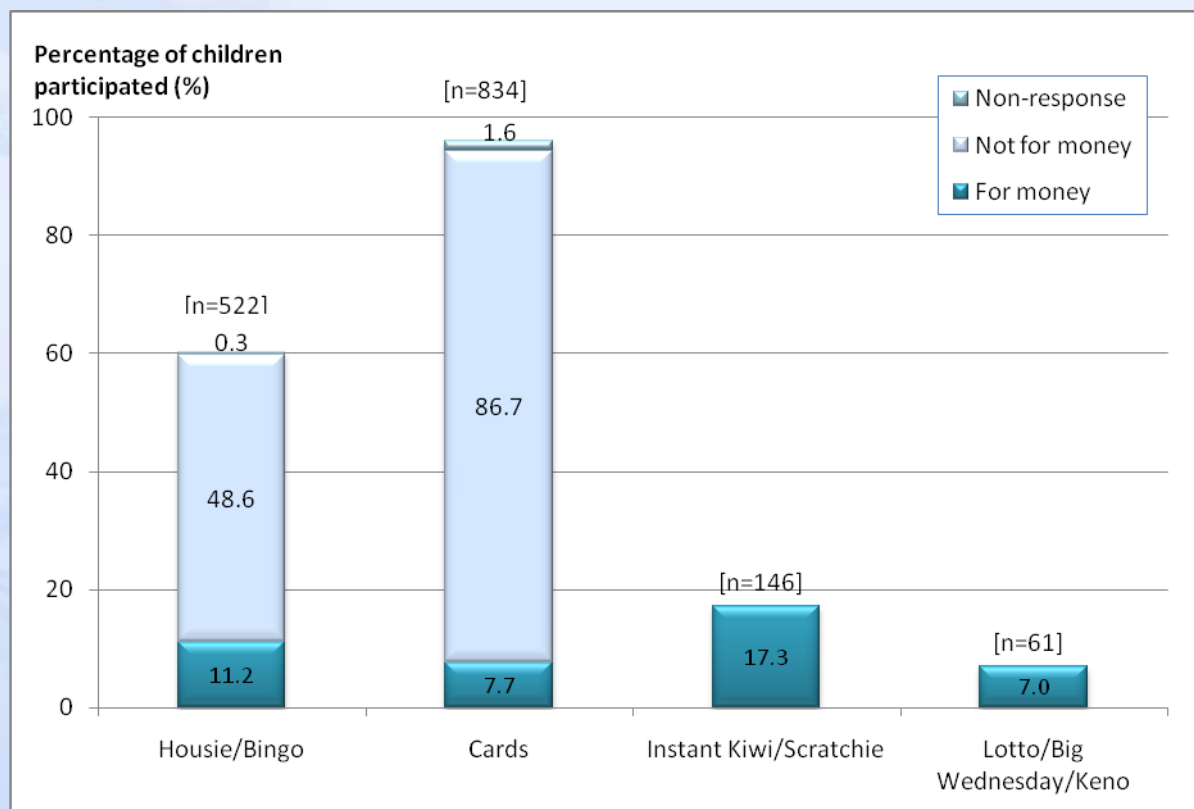
- * Change in marital status from partnered to separated associated with lower odds for gambling (OR 0.65)

2009 Gambling Data Children

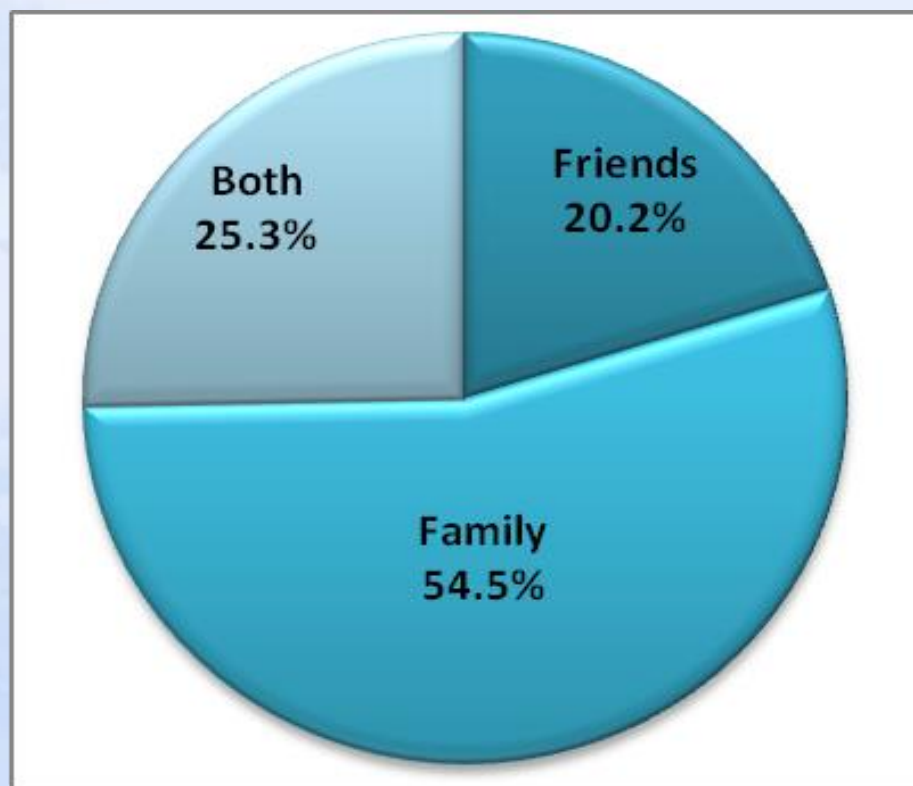
Project Design

- ✿ Children aged 9 years in 2009 (N = 996: 506 boys, 490 girls)
- ✿ A few gambling questions asked
 - ★ Have you ever bet money?
 - ★ Was this with family/friends/both?
 - ★ Have you played Housie?
 - ★ Was this with family/friends/both?
 - ★ Did you play for money?
 - ★ Have you played cards?
 - ★ Did you play for money?
 - ★ Have you received a scratch ticket as a present?
 - ★ Have you ever bought a Lotto ticket?

Results: Gambling Participation

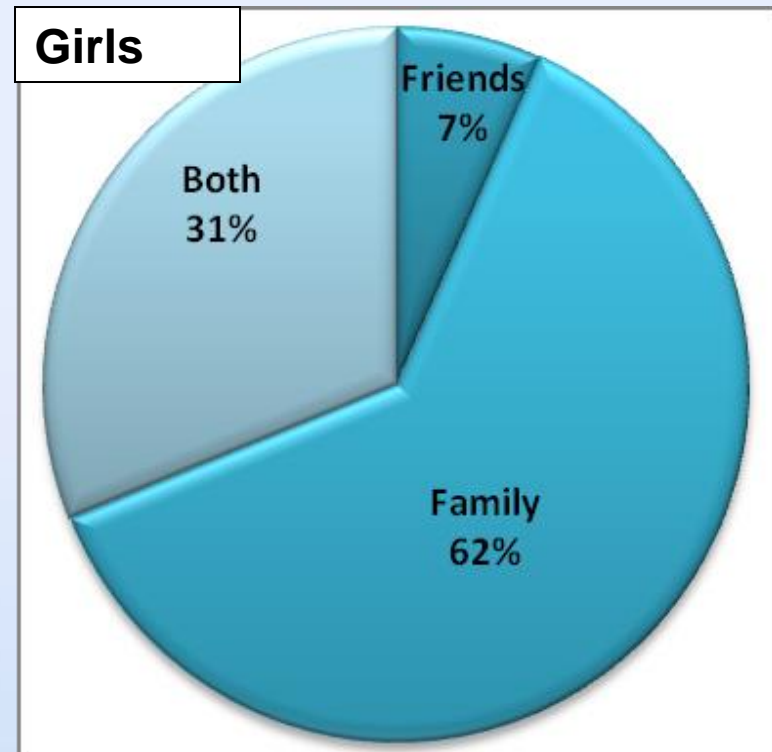
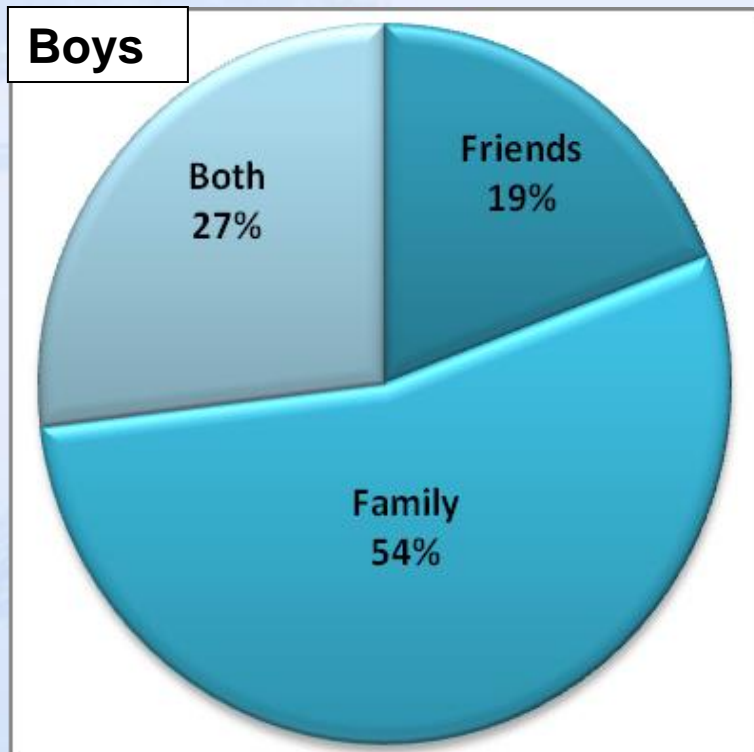


Results: Bet Money with Whom?



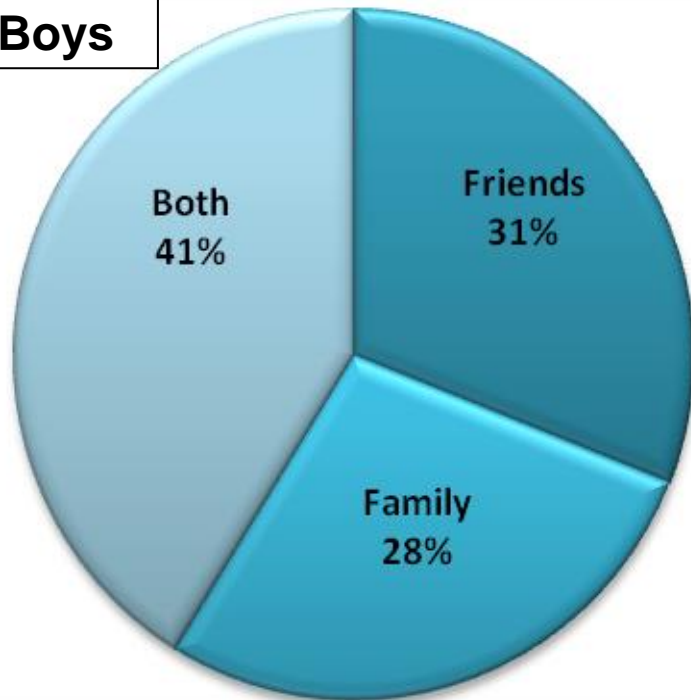
27% bet money (n=234)

Results: Played Housie for Money

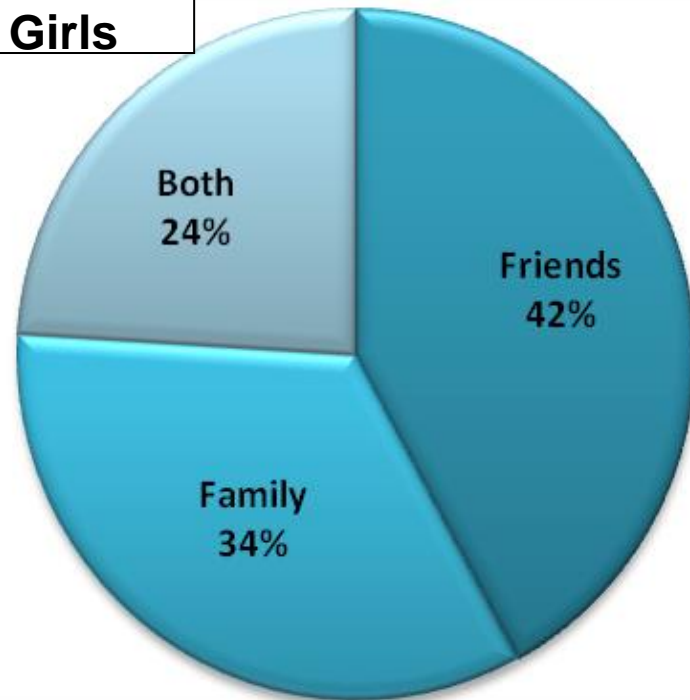


Results: Played Housie not for Money

Boys



Girls



Results: Potential Risk Factors for Gambling

- ✿ Gang involvement (OR 2.6)
 - ✱ Gang: “Any street club that carries a name, wears particular colours etc”
 - ✱ Other negative behaviours examined: Bullying, delinquency, substance misuse (NS)
- ✿ CBCL: Externalising (OR 1.9),
- ✿ Hyperactivity (OR 1.3)
- ✿ Paid work every day/almost every day (OR 2.4)
- ✿ Spend time with friends after school (OR 1.8)
- ✿ Attend after school activities (OR 1.9)
- ✿ Parental monitoring (1.5 x greater odds for gambling per unit decrease in parental monitoring)

Results: Potential Protective Factors

- ✿ Similarities test score (recognising how two words are alike/similar) – 0.95 x lower odds for gambling per unit increase in score

Conclusion

- ✿ Some potential risk and protective factors identified
- ✿ Plan to continue longitudinal follow-up of mothers and fathers
- ✿ Plan to follow the children to see how gambling behaviours change with time and how they are associated with parental gambling and other familial, social, health and environmental factors

Treatment Outcome Study

- ✿ 150 National Gambling Helpline clients
- ✿ Assessed at 3 months (86%), 6 months (79%) and 12 months (66%)
- ✿ 36 month assessments underway
- ✿ Note: A further 342 Helpline clients (in 'experimental' arms of a RCT) are being tracked/assessed concurrently (total N = 492)

Measures

- ✿ Socio-demographics (intake only)
- ✿ Gambling/problem gambling history, impacts, help-seeking
- ✿ Current gambling participation (type, frequency, losses)
- ✿ Problem gambling (PGSI)
- ✿ Comorbidity and substance use
- ✿ Quality of life
- ✿ Treatment goal
- ✿ Self efficacy
- ✿ Motivation and perceived control over gambling

Purpose

- ✿ Ascertain whether there are outcome differences between clients who only access the Helpline and those who also access additional counselling/therapy
- ✿ Identify client characteristics associated with treatment outcome
- ✿ Also allows examination of the natural history of gambling/problem gambling in a help-seeking sample of people with serious gambling problems

NZ National Gambling Study and Longitudinal Follow-up

Study Team

PI – Prof Max Abbott

Named Investigators

Dr Rachel Volberg

Assoc Prof Alain Vandal

Assoc Prof Denise Wilson

Survey Statistician

Alistair Gray

- ✿ National Research Bureau
- ✿ Reference Group
- ✿ Funded by Ministry of Health

Longitudinal Follow-up

Main interests

- ✿ The incidence of problem gambling
- ✿ Risk and resilience for problem gambling
- ✿ Factors associated with 'natural' recovery and other transitions
- ✿ Relationships between comorbidities

Design

Pilot Survey (2011)

Survey (2012)

- ✿ N = 6,251
- ✿ 1,000 mesh-blocks randomly selected
- ✿ European/other 4,035, Maori 1,164, Pacific 830, Asian 827
- ✿ Face-to-face household interviews
- ✿ Response rate 64%

Longitudinal Study (2013)

- ✿ N = 3,000
- ✿ Re-interviews with all problem and at-risk gamblers and random selection of others

Future?

- ✿ Further interviews at 24 and 36 months?
- ✿ Linkage of data sets – comparative analyses with Victorian and Swedish studies?