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## Maternal gambling associated with families' food, shelter, and safety needs: Findings from the Pacific Islands Families Study

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## Abstract

From a cohort study of Pacific families with children resident in Auckland ( $n = 983$ ) we examine the association between maternal gambling over the previous 12 months and families' food, shelter, and safety needs. Overall, 666 (68%) mothers reported no gambling, 267 (27%) reported gambling but receiving no criticism, and 50 (5%) reported both gambling and receiving criticism. Compared to those with nongambling mothers, households with gambling mothers were more likely to have both food and housing issues related to a lack of money but no excess in physical intimate partner violence.

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## Introduction

Gambling-related harm has emerged worldwide as a significant social and health issue, but the full extent of this harm in general populations remains largely unknown ([Brown & Raeburn, 2001](#)). Building upon our previous work, which identified risk factors for maternal gambling ([Bellringer, Perese, Abbot, & Williams, 2006](#)), we relate maternal gambling to Pacific families' basic human rights and needs for food, shelter, and safety.

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## Methods

Data arose from the Pacific Islands Families study, which follows a cohort of families with mothers delivering Pacific infants at Middlemore Hospital between March and December 2000 ([Paterson et al., 2006](#)). Approximately 6 weeks postpartum, female Pacific interviewers conducted home interviews with mothers.

Gambling was defined as betting activities or games with an element of luck or chance. Mothers were asked whether they had gambled within the last 12 months and whether people ever criticised their involvement in any gambling activities. We define a trichotomous gambling variable: those who did not gamble (reference);

those who did gamble but were not criticised (labelled 'uncriticised gambling'); and those who gambled and were criticised (labelled 'criticised gambling'). Experience of physical intimate partner violence was elicited using Form R of the Conflict Tactics Scale (CTS) ([Straus, 1990](#)).

Binary logistic regression analyses related gambling to dichotomised housing, food, and safety variables and were adjusted for maternal age, ethnicity, parity, social marital status, education, household income, country of birth, suffering of postnatal depression, traditional gifting obligations, maternal alcohol consumption, and cigarettes smoked yesterday. Associations between food, shelter, and safety variables were assessed using the phi ( $\phi$ ) coefficient.

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## Results

Overall, 983 mothers who delivered a Pacific infant at Middlemore Hospital between March and December 2000, and who already had another child or children, participated in this study. In the previous 12 months, 666 (68%) mothers reported no gambling activities, 267 (27%) reported gambling but had not received any criticism, and 50 (5%) reported both gambling and receiving criticism. [Table 1](#) presents percentages, adjusted odds ratios (aOR), and associated 95% confidence intervals (95%CI) of the trichotomous gambling variable associated with food, shelter, and safety variables. Associations between the food, shelter, and safety variables ranged from  $\phi = 0.06$  to  $\phi = 0.70$ , with median  $\phi = 0.15$ .

Compared to those with nongambling mothers, [Table 1](#) shows that households with gambling mothers were more likely to have both food and housing issues related to a lack of money but no excess in physical intimate partner violence. Although criticised maternal gambling households were 2.0 times as likely as households with nongambling mothers to eat limited food varieties and 1.7 times as likely to feel financially stressed about food, they were no more likely to rely on others to provide food (aOR = 1.3) or rely on sources such as food grants or food banks (aOR = 1.2) when lacking money.

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## Discussion

Maternal gambling, especially with mothers criticised for their gambling, was significantly associated with poorer basic household nutritional variety and stress due to lack of money. Food insufficiency has been associated with poor health and academic, psychosocial, and suicidal symptoms in children and adolescents ([Alaimo, Olson, & Frongillo, 2002](#)). Maternal gamblers were also significantly less satisfied with their home meeting their families' needs than nongambling mothers. Contrary to the anecdotal evidence reported elsewhere ([Tu'itahi, Guttenbeil-Po'uhila, Hand, & Htay, 2004](#)), we found no evidence to suggest that maternal

gambling was associated with significantly increased partner abuse.

## References

- Alaimo, K., Olson, C.M., Frongillo, E.A. (2002). Family food insufficiency, but not low family income, is positively associated with dysthymia and suicide symptoms in adolescents. *Journal of Nutrition*, 132, 719–725.
- Bellringer, M.E., Perese, L.M., Abbot, M.W., Williams, M.M. (2006). Gambling among Pacific mothers living in New Zealand. *International Gambling Studies*, 6, 217–235.
- Brown, R., Raeburn, J. (2001, April). *Gambling, harm and health*. The Problem Gambling Committee of New Zealand in association with the Gambling Studies Institute of New Zealand. Retrieved 21 March 2006, from <http://www.health.auckland.ac.nz/population-health/gambling-studies/content/Gambling%20Harm%20&%20Health.pdf>
- Paterson, J., Tukuitonga, C.R., Abbott, M., Feehan, M., Silva, P.A., Percival, T., et al. (2006). Pacific Islands Families First Two Years of Life study: Design and methodology. *New Zealand Medical Journal*, 119 (1228), U1814.
- Straus, M.A. (1990). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. In Straus, M.A. & Gelles, R.J. (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 29–47). New Brunswick, NJ: Transaction.
- Tu'itahi, S., Guttenbeil-Po'uhila, Y., Hand, J., Htay, T. (2004, December). Gambling issues for Tongan people in Auckland, Aotearoa-New Zealand. *Journal of Gambling Issues*, 12. Available at [http://www.camh.net/egambling/issue12/jgi\\_12\\_tuitahi.html](http://www.camh.net/egambling/issue12/jgi_12_tuitahi.html)

## Tables

Table 1

Percentage of mothers responding affirmatively to issues relating to food, shelter, and safety for gambling levels: None (n = 666), Uncriticised (n = 267), and Criticised (n = 50), with adjusted odds ratios (aOR) and associated 95% confidence intervals (95%CI)

Gambling	%	aOR	(95%CI)
<i>Level of financial difficulty with housing costs: a great deal</i>			
None	7		
Uncriticised	13	1.1	(0.6, 1.8)
Criticised	22	1.4	(0.6, 3.3)
<i>Extent of overcrowding as a problem in your home: a great deal</i>			
None	6		
Uncriticised	13	1.5	(0.9, 2.6)
Criticised	18	1.5	(0.6, 3.8)
<i>Satisfaction of home meeting needs of family: dissatisfied/very dissatisfied</i>			
None	5		
Uncriticised	13	2.7	(1.5, 4.6)
Criticised	16	3.1	(1.2, 7.7)
<i>Run out of basic foods due to a lack of money: sometimes/often</i>			
None	47		
Uncriticised	46	0.9	(0.7, 1.3)
Criticised	62	1.5	(0.7, 2.7)
<i>Skip or have smaller meals due to lack of money: sometimes/often</i>			
None	40		
Uncriticised	40	0.9	(0.7, 1.3)
Criticised	56	1.4	(0.7, 2.5)
<i>Variety of foods eaten limited by a lack of money: sometimes/often</i>			
None	37		
Uncriticised	55	1.5	(1.1, 2.1)
Criticised	68	2.0	(1.1, 4.0)
<i>Feeling stressed due to lack of money for food: sometimes/often</i>			
None	35		
Uncriticised	42	1.1	(0.8, 1.6)
Criticised	60	1.7	(1.0, 3.2)
<i>Victim of any intimate partner physical violence:<sup>a</sup> yes</i>			
None	23		
Uncriticised	24	0.7	(0.5, 1.1)
Criticised	30	0.9	(0.4, 1.9)

<sup>a</sup>162 missing observations: 152 single mothers and 10 incompletely answering CTS questions.

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