Traditional Gift-giving and Gambling amongst Pacific Mothers living in New Zealand

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Type of article: Original article.

Abstract
Cultural variables are implicated in gambling literature as playing an important role in the initiation and maintenance of gambling activity, however there remains a paucity of research that defines and investigates the association between cultural factors, gambling and problem gambling amongst different cultural groups. The first data collection point for a cohort of mothers within the longitudinal Pacific Islands Families study identified that the Pacific cultural practice of traditional gift-giving was associated with gambling activity and expenditure. In this paper, data about traditional gift-giving and gambling are presented from the third collection point within this study. The results support an association between gambling (rather than problem gambling) and traditional gift-giving. This paper contends the need to contextualise Pacific peoples gambling within Pacific cultures. Also a need is identified to examine and address the psycho-social and cultural impacts of gambling for Pacific peoples.

Introduction
New Zealand’s multi-cultural society is home to the largest migrant Pacific population in the world and Pacific peoples have developed into a defining feature within this country. People of Pacific origins have resided in New Zealand for over a century and today represent 6.9% of the total population. The largest ethnic groups are comprised of people from Samoa (131,103), the Cook Islands (58,008), Tonga (50,481), Niue (22,476) and Fiji (9,864) (Statistics New Zealand, 2006). The term ‘Pacific peoples’ encompasses a diverse population that includes people from several Island nations that occupy a range of social and economic positions and unique characteristics such as cultural protocols, etiquette, beliefs, food and crafts (Ministry of Health, 2002). Despite distinct cultural differences there are also a number of similarities between these groups, for example, the custom of traditional gift giving is a practice that is heavily embedded within many Pacific cultures.

Gift-giving refers to traditional systems of ceremonial exchange for Pacific peoples that are premised on the historically significant and cultural intricacies of maintaining relational arrangements (Meleisea et al., 1987; Tamasese, 1997). It is a practice that is either informally (through gifts of service, time and money) or formally
(through extensive gifting in the public arena) evocative of showing homage to others. Historically, although the perceived sentiment of gift-giving was to support the well being of individuals and the collective with no expectation of return, more often than not gifts were reciprocated or counterbalanced (MacPherson, Spoonley, & Anae, 2001; Meleisea et al., 1987; O’Meara, 1990; Pitt & MacPherson, 1971). *Te tega* (fine mats) and food were the usual items exchanged during gift-giving ceremonies such as weddings and funerals, however as a consequence of development within the Pacific Islands these items became supplemented and eventually dominated with the exchange of money. Today, a plethora of Pacific literature alludes to the contextual meaning and sustenance of traditional gift-giving for many Pacific peoples. In particular, it is depicted as a social obligation that is conducive to maintaining relational arrangements and fulfilling cultural responsibilities and obligations to the collective (Anae, 1998; Linnekin, 1991; MacPherson, Spoonley, & Anae, 2001; Meleisea & Schoeffel, 1998; Pitt & MacPherson, 1974; Suaalii-Sauni, 2006; Tiata, 1998). Adhering to this practice is prioritised for many Pacific peoples and as Tamasese, Peteru and Waldegrave (1997) claim, an inability to adhere to this custom validates a perceived sense of failure for individuals and seriously challenges and undermines ones sense of self worth. Today, there are significantly more formal occasions celebrated by Pacific peoples that warrant traditional gift-giving and exchange practices, and as Meleisea and Schoeffel (1998) note the increased magnitude of these events has subsequently become strenuous on individuals and their resources.

**Pacific peoples gambling**

New Zealand’s general population gambling literature consistently identifies Pacific Peoples as the most at risk of all ethnicities to develop problem or pathological gambling behaviours with a risk four to six times that of New Zealand European/Palagi (Abbott & Volberg, 1991; Abbott & Volberg, 2000; Bellringer, Perese, Abbott, & Williams, 2006; Ministry of Health, 2006). In addition, this population has also been identified as those spending disproportionate amounts of money on gambling (Abbott, 2001) despite low average incomes (Bellringer, Perese, Abbott, & Williams, 2006), those most frequently visiting casinos, those spending the most amounts of time at gambling venues (Australian Institute for Gambling Research, 1998) and those with a bimodal gambling distribution meaning that Pacific people are less likely to gamble but those who do are significantly more likely to become problem gamblers. (Abbott & Volberg, 2000; Bellringer, Perese, Abbott, & Williams, 2006). Research has also identified that Pacific individuals, families and communities have and continue to experience a multitude of negative gambling related impacts (Guttenbeil-Po’uhi’ila et al., 2004; Perese & Faleafa., 2000).

Given this less than desirable gambling profile, one is left to wonder ‘why gamble?’ and in particular ‘why gamble to the extent of being labelled the most at-risk?’ General population literature within New Zealand and Australia highlights some of the reasons for gambling as: to win money, to socialise with others, to escape, for excitement/challenge, to cope with stress, to relieve boredom, for fun/entertainment, a hobby/habit, to support worthy causes, to exercise skill or accumulate knowledge and curiosity (Abbott & Volberg, 2000; Abbott, Williams & Volberg, 1999; Abbott, 2001; Amey, 2001; Griffiths & Delfabbro, 2002; Productivity Commission, 1999; Reid & Searle, 1996). Several motivational theories implicate a number of sociological, biological and psychological influences that play a role in the development and maintenance of this behaviour. However, as yet, the etiology of problem gambling still remains unclear (Perese, Bellringer & Abbott, 2005) and as Raylu and Oei (2002) argue, these theories do not sufficiently explain any cultural differences that are associated with gambling and problem gambling between different cultural groups. These authors also argue the need for an eclectic model to address the broad social and cultural factors which play an important
role in the initiation and maintenance of gambling. Consistent with this view, Griffiths and Delfabbro (2002) contend that understandings of gambling behaviour must be inclusive of cultural perspectives.

**Pacific peoples gambling and traditional gift-giving**

Perese (2007) highlights that some of the reasons why Samoan people gamble include, to win, to fundraise, to socialise, for fun/entertainment, to escape, to relieve boredom and to increase independence and self-esteem in relationships. At a superficial level the simplicity of these reasons are not uncommon to any ethnicity or problem gambler, and remain similar to those frequently identified within the general population gambling literature. However, this author argues that exploring these reasons within Samoan culture, knowledge and epistemologies identifies that the motivations to gamble for this cultural group are indeed complex. Traditional gift-giving for example is identified as a unique and multi-dimensional cultural factor that is embedded within the notion of ‘winning money’ as a motivation for Samoan gambling. In light of additional pressures to contribute to the increased economic expectations that are now associated with traditional gift-giving, this practice is highlighted as a motivation for some Samoan people to gamble, particularly since gambling for many is constituted as a money-maker. In addition, adhering to this custom of traditional gift giving and thus fulfilling cultural roles, responsibilities and obligations is also identified as a means of concealing and maintaining gambling behaviour (Perese, 2007).

Bellringer, Perese, Abbott and Williams (2006) also provide evidence that the practice of traditional gift-giving is a cultural factor that is associated with Pacific peoples gambling activity and expenditure. At the first data collection point for a cohort of mothers who are part of the longitudinal Pacific Islands Families study, these authors identified that mothers who adhered to traditional gift-giving were more likely to have participated in gambling activities. In addition, mothers of Tongan ethnicity and those partaking in traditional gift giving were significantly more likely to have a higher weekly expenditure on gambling compared to Samoan mothers or mothers not following traditional gifting customs (Bellringer, Perese, Abbott & Williams, 2006).

This paper presents an overview of the association between traditional gift-giving and gambling and associated factors for mothers over three measurement points (six weeks, 12 months and 24 months) in The Pacific Islands Families: First Two Years of Life study (PIFS). This longitudinal investigation of a birth cohort of Pacific infants in New Zealand is designed to provide information on Pacific people’s health as well as the cultural, economic, environmental and psychosocial factors that are associated with child health and developmental outcomes and family functioning.

The purpose of identifying associations between traditional gift-giving and gambling at the six week baseline and sequential data collection phases of the PIFS longitudinal study is to track and record any trends or changes over time in regard to the impact that gambling activity can have on traditional gift-giving. These findings will develop the currently limited knowledge base on Pacific peoples gambling and provide an insight into cultural factors relevant to risk and protective factors for Pacific mothers and children.

**Methods**

Data were collected as part of the Pacific Islands Families: First Two Years of Life study which follows a cohort of Pacific Island infants born at Middlemore Hospital in South Auckland between 15 March and 17 December 2000. All potential participants were selected from births where at least one parent self-identified
as being of Pacific ethnicity and who was a New Zealand permanent resident. At the Birthing and Pacific Islands Cultural Resource Units participants were identified, information about the study was provided and consent was gained for an interviewer to conduct a home visit.

Postpartum maternal interviews were carried out at six-weeks, 12 and 24 months. Pacific interviewers fluent in English and a Pacific language visited mothers in their homes. Subsequent to obtaining informed consent, mothers participated in one-hour interviews concerning family functioning and the health and development of the child. Detailed information about the PIFS cohort and procedures is described elsewhere (Paterson et al., 2006). Over the three measurement points, these interviews included questions related to traditional gift giving and to gambling.

In regard to traditional gift-giving one of the questions that the interviewers asked was whether the primary respondents or their partners made traditional gift commitments. In a different part of the questionnaire and in regard to gambling, the interviewers read out the following examples of gambling: Lotto, poker/slot machines in casinos or pubs, raffles, card games, Housie (bingo), Instant Kiwi, horse betting and lottery tickets, then asked whether the mothers had gambled within the previous 12 months. This was intended to be a generic question only, solely ascertaining whether any form of gambling had taken place during the previous year.

If the answer to the first question was affirmative, the mothers were then asked how much they usually spent per week on gambling activities (total household income data was collected during a different part of the questionnaire).

This paper will present results from the six week, 12 month and 24 month measurement points in relation to the associations between these traditional gift-giving and gambling questions (participation and expenditure) and to any associations between the questions.

**Statistical analysis**

Chi-squared test or Fisher’s exact test where appropriate was used to explore the association between gambling/gambling expenditure and traditional gift-giving at different time point. McNemar test was used to test the difference between the changes over time of traditional gift-giving, gambling and gambling expenditure. The kappa (k) statistic was used to measure agreement for these variables over time. Due to the nature of repeated measure of the data and the dependencies existing for the variables over time, generalized estimating equations (GEE) were employed to model gambling to traditional gift-giving. The model used a binomial likelihood function, logit link function and exchangeable correlation matrix. Empirical Standard Error Estimates were used to estimate GEE parameter and standard errors. Two steps of GEE were employed. First, only the terms of gambling, time and the interaction between these two variables were explored in the GEE model. Second, backward stepwise selection methods were used to derive the GEE models by adding possible confounding factors such as mother’s age, ethnicity, marital status, education level, house income, mother was born NZ, years living in NZ, cultural alignment and religion. Specifically, starting from the saturated model with main effects and interaction between gambling and time, the non-significant effect that contributed least to the GEE model (based on the z-statistic) was identified and eliminated from the model and the regression re-run until all variables remaining in the GEE model were statistically significant. For these confounding candidates, most of them were treated as fixed variables due to the feature of stability (i.e. ethnicity) or unavailability of changes (i.e. house income was only available at
6 weeks) over time. Gambling, education level and marital status were treated as time-varying.

The same procedure was used to model the association between gambling expenditure and traditional gift giving. All analyses were performed using SPSS version 14.0 and SAS version 9.1 statistical software packages and a significance level of \( \alpha = 0.05 \) was used to determine statistical significance for all calculations.

Results

Ninety six per cent (N=1590) of potentially eligible mothers of Pacific infants who were born at Middlemore Hospital, South Auckland, New Zealand during the year 2000, consented to being visited in their homes when the infant was six weeks old. Of the 1477 mothers subsequently contacted and who met the eligibility criteria, 1376 (93.2\%) agreed to participate in the study. Of the 1376 mothers, 47.2\% identified their major ethnic group as Samoan, 21\% as Tongan, 16.9\% as Cook Island, 4.3\% as Niuean, 3.4\% as Other Pacific, and 7.2\% as Non-Pacific. The Other Pacific group consists of mothers identifying equally with Pacific and Non-Pacific groups, or with Pacific groups other than Samoan, Tongan or Cook Island. The Non-Pacific group refers to mothers of other ethnicities whose infants were fathered by Pacific men. The mean age of mothers was 27 years (SD = 6.2), 80.5\% were married or in a de facto relationship, 33\% of mothers were born in New Zealand, and 27.4\% had post-school qualifications.

Gambling and Traditional gift-giving at different time points

At 6 weeks all 1376 mothers in the cohort study responded to the question regarding traditional gift-giving. At 12 months, 88\% (N=1207) of these mothers responded and at 24 months there was a response rate of 82\% (N= 1132). Sixty two point five percent, 52.4\% and 73.7\% mothers reported traditional gift-giving at six weeks, 12 months and 24 months postpartum, respectively. There were moderate associations of gift giving between 6 weeks and 12 months, 6 weeks and 24 months, and 12 months and 24 months (\( \kappa = 0.31, 0.34 \) and 0.27). Generalised estimating equations, which compared the prevalence rates of reported traditional gift-giving at each of these three time points, revealed that there was significant change in the numbers of people practising traditional gift giving at six weeks, 12 and 24 months. When compared with six weeks, the odds of mothers reporting traditional gift-giving at 12 months was 0.67 times lower (95\% CI: 0.58, 0.76), and at 24 months was 1.63 times higher (95\% CI: 1.41, 1.88).

Overall, there was a slight increase in the number of mothers who reported gift-giving between six weeks and 24 months (62.5\% and 73.7\%). Also, mothers who reported gift-giving at six weeks were more likely to continue adhering to this practice over time (i.e. at 12 and 24 months). Mothers who reported no gift-giving at six weeks were more likely to begin this practice at 12 and 24 months.

Of the 1376 baseline mothers and in response to the first gambling question, 30.1\% responded in the affirmative at six weeks, 30.7\% at 12 months and 29.4\% at 24 months. There were moderate associations of gambling between 6 weeks and 12 months, 6 weeks and 24 months, and 12 months and 24 months (\( \kappa = 0.36, 0.26 \) and 0.22). Generalised estimating equations revealed that there were no significant differences between the rates at different times. The odds of mothers reporting gambling activity were 1.04 (95\% CI: 0.90, 1.19) at 12 months and 0.94 (95\% CI: 0.81, 1.09) at 24 months compared with 6 weeks.

Association between gambling and traditional gift giving at different time points

Table 1 presents the prevalence of gift giving by gambling status and significant associations between gambling and traditional gift-giving over three measurement points (six week, 12 and 24 months). Generalised
estimating equations were also employed to examine the overall association between gambling and traditional gift-giving over six weeks, 12 and 24 months. The bivariate model (effect of gambling and time) revealed that there was an interaction between gambling and time (i.e. the extent and directions of associations between gambling and traditional gift-giving were different over time). Compared with non-gambling mothers, odds of mothers reporting traditional gift giving were 1.30 times higher for gambling mothers at 6 weeks (P =0.0219); 1.07 times higher at 12 months (P=0.5369), and 0.58 times lower at 24 months (P<0.0001). Multivariable analysis suggested that except for education, gambling and all other socio-economic factors such as mother’s age, ethnicity, marital status, household income, being born in New Zealand, years living in New Zealand, cultural alignment and religion, were significantly associated with the practice of gift-giving. After adjustment for the confounding factors, gambling was significantly associated being 2.3 times less likely to take part in traditional gift-giving at 24 months, however there was no association at 6 weeks or 12 months.

Table 1. The prevalence of practising traditional gift-giving and crude odds ratio, adjusted odds ratio and 95% confidence intervals of practising traditional gift giving by mothers who gambled over time

<table>
<thead>
<tr>
<th>Time</th>
<th>Gambling</th>
<th>Traditional gift-</th>
<th>Bivariate</th>
<th>Multivariable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>giving</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
<td>Crude OR</td>
</tr>
<tr>
<td>6 weeks</td>
<td>No</td>
<td>577</td>
<td>60.0</td>
<td>ref</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>283</td>
<td>68.4</td>
<td>1.30</td>
</tr>
<tr>
<td>1 year</td>
<td>No</td>
<td>433</td>
<td>51.8</td>
<td>ref</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>200</td>
<td>53.9</td>
<td>1.07</td>
</tr>
<tr>
<td>2 years</td>
<td>No</td>
<td>615</td>
<td>77.0</td>
<td>ref</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>218</td>
<td>65.9</td>
<td>0.58</td>
</tr>
</tbody>
</table>

* Adjusted by mother’s age, ethnicity, marital status, house income, mother was born NZ, years living in NZ, cultural alignment and religion (education level was removed from the final model due to insignificance)

Table 2 presents the prevalence and odds ratios of reported gift-giving by gambling expenditure over three measurement points (six weeks, 12 and 24 months). Overall, mothers who reported gambling and spent more that $20 per week on gambling activities were also more likely to practice gift-giving. The bivariate GEE model (effect of gambling expenditure and time) revealed that there was no interaction between gambling and time. Overall, months those mothers who reported gambling and spending more than $20 were 1.61 times more likely to gift-giving than those spending less than $20 (P=0.0005). In the multivariate model the effect remained very similar and significantly different (OR: 1.64; 95%CI: 1.18, 2.28; P=0.0033).
Table 2. The prevalence of Gambling expenditure and crude odds ratio, adjusted odds ratio and 95% confidence intervals of practising traditional gift-giving by mothers who spent more than $20 per week over time

<table>
<thead>
<tr>
<th>Time</th>
<th>Gambling</th>
<th>Traditional gift-giving</th>
<th>Bivariate</th>
<th>Multivariable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
<td>Crude OR</td>
</tr>
<tr>
<td>6 weeks</td>
<td>&lt;$20</td>
<td>182</td>
<td>63.9</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>$20+</td>
<td>101</td>
<td>78.3</td>
<td>N/A</td>
</tr>
<tr>
<td>1 year</td>
<td>&lt;$20</td>
<td>130</td>
<td>49.8</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>$20+</td>
<td>70</td>
<td>63.6</td>
<td>N/A</td>
</tr>
<tr>
<td>2 years</td>
<td>&lt;$20</td>
<td>154</td>
<td>67.3</td>
<td>ref</td>
</tr>
<tr>
<td></td>
<td>$20+</td>
<td>59</td>
<td>71.1</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>&lt;$20</td>
<td>ref</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$20+</td>
<td>1.61</td>
<td>(1.22, 2.11)</td>
<td></td>
</tr>
</tbody>
</table>

* Adjusted by same confounding factors from Table 1.

Discussion

The knowledge base on contemporary Pacific gambling remains limited despite the high risk of problem gambling within this ethnic group. The Pacific Island Families Study (PIFS) is the only study to provide an insight into Pacific female gambling activity over time and the cultural practices associated with this.

Gambling and Traditional gift-giving at different time points

The majority of mothers at the six week and 24 month measurement points reported gift-giving (62.5% and 73.7% respectively). These findings support claims that gift-giving remains an important cultural practice that is sustained in various ways by many Pacific peoples in New Zealand (Anae, 1998; Macpherson, Spoonley, & Anae, 2001; Meleisea & Schoeffel, 1998; Suaoali-Sauni, 2006). In light of the change in the number of mothers reporting gift-giving between six weeks and 24 months, this study identifies that there is a significant association between gifting and time. This finding requires further exploration beyond the scope of this article and is detailed in a separate series of papers purposed to examine and contextualise the changing patterns of traditional gift-giving for mothers in the Pacific Islands Family Study cohort.

Approximately 70% of mothers at the six week and 24 month measurement points reported no gambling in the previous 12 months. This finding is consistent with low participation rates found amongst Pacific peoples in both the 1999 general prevalence survey and the 2002/03 New Zealand Health Survey. In light of the disproportionately high prevalence of problem gambling and bimodal gambling distribution amongst the smaller number of Pacific peoples who do gamble this finding supports that there is an increased propensity for risk for Pacific gamblers. Also this study identifies an interaction between gambling and time which is further explored in an article (currently in progress) that examines gambling activity (rather than problem gambling) from the 24 month measurement point and the consistencies and discrepancies of gambling activity and expenditure between the six week baseline and 24 month measurement points.
Mothers who reported gambling activity at six weeks were more likely to report gift-giving when compared with non-gambling mothers. An association between gift-giving and gambling was evident across the six week, 12 and 24 month measurement points. Consistent with the six week data, mothers who reported gambling activity also remained more likely to gift-give at the 12 month measurement point. However at 24 months a significant negative association was identified. This finding highlights that gambling has a unique relationship with traditional gift-giving. In light of the importance placed on gift-giving by Pacific peoples this finding provides an insight into the impact that continued gambling activity can have on cultural practices unique to Pacific populations. Further research is required to investigate and address the psycho-social and cultural implications of this on the holistic wellbeing of Pacific peoples.

Although there were fewer mothers gambling at the 24 month measurement point, those who did continue to gift-give and were more likely to spend increased amounts of money on gambling activity. Perese (2007) identifies that adhering to gift-giving and thus fulfilling cultural roles, responsibilities and obligations can aid in concealing and maintaining problem gambling behaviour. Given this view, further research is required to investigate whether continued gift-giving for mothers who gamble could be a risk factor for increased gambling expenditure and problem gambling behaviour.

Consistent with Bellringer et al, (2006) and Perese (2007) this study identifies that the cultural practice of traditional gift-giving can be associated with the gambling activity and expenditure of mothers in the Pacific Islands Families Study cohort. The implication here is that cultural factors do play an important role in the initiation and maintenance of gambling activity for this Pacific population.

This paper provides a Pacific specific investigation into the consistencies and inconsistencies that have occurred with traditional gift-giving and gambling (activity and expenditure) over time. It highlights areas associated with contemporary Pacific gambling that require further exploration from a Pacific worldview.

The authors recognise that there are several limitations to this study. In particular the gambling questions are brief and thus provide limited information.

Also the associations examined in relation to gambling have been selected by the authors from a large range of variables investigated as part of the longitudinal Pacific Islands Families study and other potentially more important variables may have been overlooked. It is hoped that these issues can be at least partially addressed at future measurement points within the longitudinal study.

Additionally, the associations that have been discussed were those selected and considered by the authors to be of most relevance to developing the limited knowledge base and understandings of Pacific specific cultural factors and contemporary Pacific gambling.
References


“Great spirits have always encountered violent opposition from mediocre minds”

*Albert Einstein*