Reversing the Harmful Effects of Gambling in Indigenous Families: The Development of the *Tu Toa Tu Maia* Intervention

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Abstract

Although gambling misuse amongst Māori is a critical public health issue, little investment has been made in Indigenous interventions to address this harmful behaviour at a community level. This paper outlines the development of an intervention created specifically for use by Māori health promoters, to ensure services meet the needs of Māori gamblers and their *whānau* (extended family). Using a *kaupapa* Māori method of analysis, data from 20 qualitative interviews with Māori women, and contract work in a Māori community, a checklist for safe gambling in *Te Arawa* was devised. Development of the *Tu Toa Tu Maia* resource employed a collaborative approach, drawing on the wisdom and advice of Elders, community members, and other stakeholders. The findings from the small doctoral study and contractual work demonstrate that culturally congruent resources, using metaphors that Indigenous peoples understand and can relate to, are more likely to be accepted in Māori communities. The paper provides an overview of the doctoral study, outlining the participants, method, and discussion with a view to elucidating how Laurie Morrison came to develop the *Ta Toa Tu Maia* resource. The paper concludes by noting that through real, collaborative, and informed engagement with Indigenous communities, culturally congruent and relevant resources to address public health problems experienced by these communities, can emerge.
Keywords: public health, gambling misuse, cultural identity, Māori, Indigenous.

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Introduction

This paper draws on the findings from two separate but related pieces of work which led to the development of a gambling harm minimization intervention to meet an identified need within a Māori community. The first piece of work is a small qualitative study undertaken by Laurie Morrison as part of her PhD. The study focused on understanding the health implications for Māori women and their *whānau* (extended family) of the new forms of gambling emerging in *Aotearoa*/New Zealand, such as casinos, Electronic Gaming Devices (EGDs), and internet gambling. *Kaupapa* Māori methodology and a naturalistic approach to data collection (Patton, 1990) were used in combination to frame the study design. A Māori research procedure modelled on the ritual ceremony of encounter (*pōwhiri*) provided a culturally relevant and appropriate structure for the development and presentation of the research process (Morrison, 2008).

The PhD study set out to discover what culturally appropriate gambling harm minimization services were available to Māori women, if any, and the extent to which Māori women gamblers were utilizing these. A key finding from this study was the importance of Māori imagery and cultural icons as the basis of intervention tools for Māori *whānau*.

The second piece of work was conducted by Morrison in her role as a public health consultant, working with a local Māori problem gambling provider — Te Kahui Hauora Trust (TKHT). The trust is responsible for delivering public health and clinical

interventions in the *Rotorua*[1] region. Recent changes in the monitoring of Māori health providers, and greater scrutiny more generally have significantly affected the trust. In a very short space of time TKHT was expected to demonstrate a reduction in gambling harm rates for their population. They identified the need for a more strategic approach to minimizing gambling harm in their community; in particular, a culturally appropriate health program specifically for Māori women was a priority. Dr. Morrison was therefore contracted to work with TKHT to identify such a program and advise on its implementation.

In conducting these two related pieces of work Morrison discovered that few, if any, culturally congruent gambling harm minimization resources existed. However, public health evidence indicates that any significant reduction in the harms caused by gambling in our Māori *whānau*, requires a multipronged strategy, utilizing the best public health approaches and harnessing the latent power of our Māori communities. The Indigenous intervention that Morrison developed as a consequence of these two pieces of work is presented.

Gambling as a Health Concern for Māori

Context

The social problem of Māori women gambling has been a matter of increasing public debate in *Aotearoa*/New Zealand, particularly since the introduction of new, and arguably easier, forms of gambling (Abbott and Volberg, 2000). Electronic Gaming Devices (EGDs), known in *Aotearoa*/New Zealand as pokie machines, have been linked to women and problem gambling (Volberg, 2003). The introduction of these machines brought an explosion of gambling related issues and a rapid development of gambling services to meet this need (Abbott et al., 2000; Dyall and Morrison, 2002; Morrison, 2003).

Despite the rise in problem gambling, there is a dearth of research evidence pertaining to Māori women and gambling in general, and of casino and pokie gambling in particular. Most of the research on the reasons for gambling and its health implications is devoid of any socioeconomic context, tends to be focused on the pathology of gambling practices, and has been undertaken by non-Māori researchers (Abbott and Volberg, 1991, 1992, 1994; Abbott, 1998). Although surveys and prevalence studies on gambling in *Aotearoa*/New Zealand provide important information about gambling behaviour, research which specifically investigates Māori women's gambling issues is limited.

A study of Māori women gamblers in prison has provided some insight into Māori women's gambling behaviour, indicating that not only are Māori women participating in gambling-related crimes but that pokie machine gambling has increased for Māori women (Abbott et al., 2000). Another small study undertaken by Morrison (1999) provided useful information about the gambling behaviour of a group of *Te Arawa* women. Unfortunately both studies are limited in their generalizability by the size of the study samples.

The dearth of evidence and data on the size, scope, and exact nature of problem gambling among Māori women is not only a barrier to recognizing that the women, their *whānau*, and the broader community may be harmed by such activity, but also prevents the development of appropriate and relevant solutions. Examining and understanding the reasons Māori women gamble more than non-Māori can assist in planning health promotion and public health interventions, aid in the establishment of support networks similar to those available for drug and alcohol addictions (Robertson et al., 2002), and be used to advocate for resources to raise Māori awareness of the risks of harm from gambling (Abbott et al., 2000; Abbott, 2001; Dyall and Hand, 2003; Gruys et al., 2000; Morrison, 2003).

Public Health and Gambling

In 2003, New Zealand became the first country in the world to place problem gambling as a public health issue (Ministry of Health, 2001). Public health addresses health issues at a population level, including looking at the health issues affecting subpopulations, such as Māori (Moewaka-Barnes, 2009). A public health approach considers aspects of problem gambling in relation to vulnerable groups, removing

1 *Rotorua* is a provincial town located in the middle of the North Island of New Zealand

the focus from the individual (Adams et al., 2003). Public health takes a much broader view, identifying multiple strategies for the wider health, social, and economic costs and benefits, giving priority to the needs of vulnerable people (Korn and Shafer, 1999).

The societal indicators of wellbeing clearly illustrate that the harm caused by problem gambling should be an on-going concern for the community (Raeburn and Herd, 2003). The cost to the community of problem gambling is, to a large extent, hidden from public view, seldom discussed between or within local communities. The lack of discussion by communities in turn hinders the efficacy of any public health or health promotion approach. Complicating matters even further is the recognition that to deal with what may be one of the most complex behavioural addictions, treatment providers for problem gambling must possess a high level of skill and expertise (Sullivan, 1999).

Tools, Measures, Responses

The Southern Oaks Gambling Screen (SOGS) is arguably the most widely accepted measurement tool for gambling. However, gambling therapists in *Aotearoa*/New Zealand have discovered that this American-designed assessment tool does not reflect the realities of our culture or the unique make-up of our society. In focusing on the individual, the tool excludes the social and cultural context, making it impractical for Māori use (Sullivan, 1999).

The Early Intervention Gambling Health Test or EIGHT Screen is a brief gambling screen originally designed to identify problem gambling among a general practice doctor's patient population (Sullivan, 1999). The screen includes eight questions that cover health, emotional, cognitive, and behavioural dimensions. A score of four or more indicates significant gambling problems. The screen is regarded as practical, brief (self-completed in approximately one minute), and simple to score, providing prompt assessment and feedback (Stockdale, 2003).

Despite the EIGHT screen test's utility, like many other public health tools and interventions, it was developed for use in a homogenous population, who live and are expected to act in accordance with a specific set of values and traditions that are not Indigenous or reflective of an Indigenous lived reality. The need for assessment and measurement tools which incorporate Indigenous values and worldviews, and can be used in conjunction with culturally appropriate interventions (Stockdale, 2003) is, in the *Aotearoa* context at least, both significant and critical.

Māori Models to Understand Health and Wellbeing

Traditionally for Māori, information was community based and an integral aspect of living, in which presence and time were elemental to the process of learning (Durie, 1999). From times immemorial traditional Māori communities linked to an eponymous ancestor. Iconic landmarks were used as signposts to guide Māori to their *turangawaewae* (home) and *iwi* (tribe) (Walker, 1990). Learning was a holistic process and Māori were very much in tune with their ecological environments (Durie, 2001). Ancestral knowledge has been integral to advances in Māori public health thinking and practice as this form of knowledge provides an appropriate cultural context, with relevant Māori processes and contextually appropriate resources (Boulton et al., 2009).

Māori have made significant inroads into the development of culturally appropriate interventions for a range of public health issues (e.g., smoking, nutrition, and physical exercise) changing the focus of public health care and health promotion. Frameworks to conceptualize and articulate Māori health concepts first gained impetus following the development of *Te Whare Tapa Whā* a four-part framework comprising a set of interacting variables that encompass a holistic view to healing (Durie, 1994, 1999). Another model of Māori health is based on *Te Wheke* (the octopus), a creature that in its entirety can be used as a metaphor to understand the concept of *waiora* or total wellbeing (Pere, 1997). Similarly, *The Galleries* and the use of constellations was a further framework developed by Bob Elliott and other Māori mental health workers to guide psychiatric nurses (Huata, 1998). An additional use of the constellations was *Te Pae Mahutonga*. In this case the Southern Cross Star constellation represents four key tasks to promote health (Durie, 1994, 1999). This model is well recognized and used amongst Māori and non-Māori public health prac-

titioners and researchers in other areas of public health (Ministry of Health, 2010a, 2010b).

At the outset of Morrison's doctoral research it was unclear how, or indeed whether, gambling services were meeting the needs of Māori women who had been affected by the proliferation of pokie machines (Abbott and Volberg, 2000; Dyall and Morrison, 2002, Watene and Thompson, 2007). What was known at a community level was that gambling counsellors for Māori women were few in number, tended to work for mainstream organizations, and were not always available. Small steps had been taken to raise awareness of the need for culturally grounded models. For example, in 2005 Māori had the opportunity to share their knowledge and expertise with a number of Australian gambling regulators attending the International Problem Gambling Conference in Auckland. A cultural model to reduce gambling related harm in *Aotearoa*, the *pōwhiri* model, was first mooted for consideration to support gambling host responsibilities (Dyall and Manaia, 2005). The model is based on the ritual of first encounter that takes place on the traditional meeting ground of Māori, articulating the step by step process that is required when visiting a *marae* (the traditional meeting place of Māori) (Tauroa and Tauroa, 1986). The cultural model found favour with a number of international academic researchers and regulators because of its direct relevance to Māori as a people. However, although the model is culturally appropriate, developed by Māori and for Māori, there is no evidence yet that it has been implemented by Māori or non-Māori gambling providers.

Māori health researchers have called for cultural related resources, developed by and for Māori, to give health providers and practitioners more effective tools in reducing gambling harm (Dyall and Morrison, 2002; Dyall and Manaia, 2005; Morrison, 2008; Robertson et al., 2002; Stockdale, 2003). Dyall and Manaia (2005) in particular observe that more Māori-led research is required to assist public health officials and Māori practitioners develop appropriate resources and interventions to reduce gambling harm. Recently, government has also indicated a willingness to support culturally appropriate harm reduction models with the Ministry of Health proposing that a culturally appropriate approach become standard practice in all problem gambling services (Ministry of Health, 2010a). Clearly then, the stage is set for a culturally congruent, harm reduction intervention.

The Doctoral Research

The intervention discussed here drew upon two sources of empirical data — the findings of a set of semistructured interviews undertaken with twenty Māori women gamblers and the results of a piece of consultancy work undertaken on behalf of a Māori problem gambling provider. In this part of the paper we briefly describe the methodology that was used to collect data from the women, outline the demographic characteristics of the Māori women themselves, and present the findings from the interviews that informed the development of the culturally congruent, gambling harm minimization model.

A qualitative, naturalistic approach (Patton, 1990) was used to gather information required to achieve the study goals. This approach was considered appropriate to the focus on a specific problem (Patton, 1990) and to access information-rich cases (Robson, 1993). Qualitative methodology allowed an in-depth and detailed interpretative study (Patton, 1990), provided the opportunity for the researcher to understand the world as seen by the participants, and provided data capturing the viewpoints of other people without predetermining them (Patton, 1990).

The research with Māori women gamblers was conducted in two sites: *Rotorua*, a regional city, and Morrison's home, and Auckland, *Aotearoa*'s largest and most populous city with some one million inhabitants. While only one of the women lived in metropolitan Auckland, seven lived in suburban Auckland and a further two in a small town near Auckland. Six of the participants lived in *Rotorua* city, one in its hinterland and three in the adjacent coastal region.

The women who participated in the study varied greatly in age, marital status, employment status, religion, and tribal affiliation, illustrating the great diversity of the contemporary Māori population (Durie, 1997). All 20 gamblers were Māori women,

ranging in age from 20–65 years. In addition to 2 *kuia kaumātua* (older women) aged between 60–65 years, there were 5 between 50–59 years, 7 between 40–49 years, and 6 between 20–39 years. Further information is provided in Table 1.

Table 1. Participant Demographics

Marital Status	
Single	2
Married	10
De facto	2
Same sex	2
Separated	4
Employment Status	
Beneficiaries	7
Employed	10
Self-employed	3
Religion	
Catholic	10
Anglican	4
Ratana	1
No affiliation	4
Other Christian	1
Tribal Affiliation	
Te Arawa	10
Nga Puhi	2
Tainu	2
Ngati Whatua	1
Tuhoe	1
Ngati Raukawa	1
Ngai Tahu	1
Cook Island Māori	1
No *iwi*	1
Geographic Location	
Metropolitan Auckland	1
Suburban Auckland	9
Coastal BOP	4
Rotorua	6

In addition to demographic information, the women's gambling status was also recorded. Self-reported motivations for gambling included: perceiving it as a social activity (2); being addicted to gambling (4); being a compulsive gambler (3); being financially hopeful (5); being bored (1); wanting time out for self and from *whānau* (2); believing it hereditary (1); considering self just a gambler (1); and as a compensation for grief (1).

In the sample group, 14 said that they saw their gambling as problematic and 6 stated that they did not. Pokies were reported by 18 of the participants as their main mode of gambling; 6 of these also went to the casino. The remaining 2 participants said that they solely used the casino. The frequency of gambling for those who used the pokies ranged from daily (7), through to more than once a week (3) and weekly (9).

Of the participants who gambled daily, 7 claimed to have reduced their gambling. Of these, 2 said they reduced gambling after attending counselling, another participant reported reducing gambling after attending a Māori women's support group and one other reported that pressure from *whānau* helped her to reduce gambling. The remaining 3 gave no reason. The 2 casino players gambled daily.

The expenditure reported per session by 5 of the participants was $20; 2 spent between $100–$200, while 5 spent from $200 up to $499 and the remaining 5 reported that they gambled from $500 up to $20,000 per session. Further information is provided in Table 2.

The Findings

The findings from the Māori women gamblers relating to the need for culturally congruent harm minimization models are presented and discussed below. The findings are presented under two key themes: Māori iconology and service appropriateness. Māori iconology refers specifically to the deliberate use by machine makers of Pacific/indigenous cultural symbols and icons, and the sense of "connectedness" Māori women feel when they play these machines. The theme of service appropriateness refers to the women's call for support services specifically targeted to their needs and cognisant of the women's cultural values and worldviews.

Māori Iconology — Personifying Pokie Machines

Incentives to gamble on pokie machines varied from the ease with which they could be played to the fantasies in which gamblers could engage. An important point in understanding the so-called "pull" factors for women who gambled, i.e., what attracted them to gamble, was their personification of the gambling machines, which enabled them to enter into what they perceived as a real relationship.

> I love the feel of the machines. I stroke them and ask them to be a good pokie for me. I even kiss them and talk to them all the time. If I win then they are just the bomb. [*Takapu*]

Table 2: Gambling Status

Participant	*Self-reported Motivation*	*Perceived as a Problem?*	*Mode*	*Frequency*	*Reported Expenditure per Session*
1	Social	No	Pokies	Weekly	$40.00
2	Gambles with *whānau*	Yes	Pokies	Regular	$100.00
3	Addicted	No	Pokies	Weekly	$20.00
4	Troubled by gambling	Yes	Pokies	Originally daily, but reduced	$200.00
5	Compulsive	Yes	Pokies	Twice weekly	$200.00
6	Just a gambler	No	Pokies	Weekly	$20.00
7	Hereditary	No	Pokies	Weekly	$20.00
8	Relief of boredom	Yes	Pokies	Originally daily, now reduced	$300.00
9	Time out from husband	Yes	Pokies	Originally daily, reduced after counselling	$400-1000
10	Financially hopeful	No	Pokies	Weekly	$50-100
11	Financially hopeful	Yes	Pokies	Twice weekly	$40-60
12	Relief from work stress	Yes	Pokies	Originally daily, reduced after counselling	$20-900
13	Financially hopeful	Yes	Pokies, casino	Daily	$4,000
14	Coping with family loss	Yes	Pokies, casino	Originally weekly; now stopped	$200-$400
15	Compulsive	Yes	Pokies, casino	Originally weekly, reduced from *whānau* pressure.	$500–20,000
16	Addicted	Yes	Casino	Originally daily, reduced after Māori program attendance	$20,000 debt
17	Addicted	Yes	Pokies, casino	Daily	$5000+
18	Financially hopeful	Yes	Pokies, casino	Daily	$200-500+
19	Addicted, but *whānau*'s fault	Yes	Casinos	Originally daily, now stopped after values reversion	$200+
20	Living in unreality	No	Pokies, casino	Weekly Infrequently	$20 max $20

> I can have sexual orgasms at the machine. It is the most awesome feeling and a very intense relationship that I have with the pokies. All I have to do is feed it and I get a reward. [*Toutouwai*]

Some of the women reported that during their gambling sessions the machines took on human qualities. Iconology used in the physical design of the pokie machines such as "Pina Colada" and "Multi Star" enabled the women to involve themselves in a fantasy life. Two women said that they could create another identity, with one commenting that she could imitate the experience of living the life of an actress when they played on a pokie machine.

> I can be whoever I want to be. If I want to be in a jungle setting I play on the Triple Tiger and Jungle cash machines. I too can be Jane and Tarzan. My favourite are the Multi Star machines. Now that is where I get to be the best actress of all, and the attention when those bells start ringing; it is almost orgasmic. Yes, that is what it is like for me. [*Pukeko*]

> When I first played the machines in Aussie I sought out the machine that had the Pina Colada and I could fantasize that I was in Hawaii. It is just surreal. [*Korora*]

Most of the women said they were mesmerized by the brightness and flashiness of the graphics on the machines that were cleverly designed to draw them in to gamble. Two of the women said that the machines talked to them and lured them to continue gambling.

> And the pictures; they just grab you. There are some really beautiful pictures in those poker machines; really gorgeous pictures. And that is what makes me try another game, and another, to see what the pictures are and what the machine does. [*Tui*]

> When I am in the club, the machines, they certainly attract you to them and gee, they are clever the way that they have made the machines appealing. They just draw you to them; the bright colours, and they really do speak to me, honest, they do! Then I go, 'oh better go and put some money in it.' [*Korimako*]

Whilst this personification was seductive in drawing in some of the women to play, others sought out a pokie machine that was perceived as a Māori symbol of good luck and one woman described how the machine talked back to her when she lost her money.

> For me it's all about Tiki being a good luck charm for me. I always look for Tikitiki because he's one of us, and he is our Māori good luck charm. I have greater skill level on my favourite machine, TikiTiki. I give him a wink every time and you know he tells me when I've lost money. He says, '*arohamai*' to me when I lose money; he does too! [*Kea*]

Service Appropriateness

There were a number of barriers that hindered Māori women's attempts to stop gambling, including not having instant access to gambling counsellors or services that did not reflect Māori culture.

> I have been to [Gambling Provider] in the city.... I am not being horrible or anything but they were very Pakehafied. I found that I could not be myself. [*Karearea*]

Five of the women attended a Māori women's support group run by Māori gambling counsellors from a *kaupapa* Māori philosophy. The support group was local, transport was provided for those women who had no transport and of importance was some women were able to receive immediate responses to help with their distress.

> I got in touch with [Māori Gambling Service Provider]. I found what made the difference was that I phoned them. By late afternoon two of the ladies arrived at my home. It was, like, immediate response, because when you are a gambler and you are trying to give up you sometimes need that immediate response. When you are at your lowest ebb, normally that is when you want to give up, and I was quite low at that time. Yes, the difference was that they came to me. It was good because, normally, when I have decided to give up I was broke anyhow and I could never make it to any meeting because I did not even have a bus fare. So that made a difference, and also that they arranged transport to and from home. [*Karearea*]

Some who had previously attended non-Māori gambling services said that, although they had received some support, it had not been enough.

> When I first got there [Māori Support Group], I was apprehensive and I thought, 'Oh yeah, what are these guys going to do for me that my counsellor hasn't already done?' But, you know, we didn't even talk about gambling on the first day and it buzzed me out. I was so buzzed out, I got up first and introduced myself, because I had been telling my story to counsellors and the Police, CYPFS [Children, Young Persons and their Families Services], everyone. Then I got asked some questions by [facilitators], and that was different, because before, my experience with the cops and CYPFS was that they would never go deep. It was just all surface stuff. But these facilitators opened me up for me to be able to talk about it, because they could understand where I was coming from. So that really helped me a lot. [*Miromiro*]

Māori protocols of sharing food were upheld, facilitating communication and encouraging a sense of cultural safety.

> We had lunches, and I mean, not every time. Can I go out and have someone counselling me and giving me a *kai*? We had lunch and it was nice to feel part of a positive group. These are people that I have just met and these are the only people outside of my gambling environment, these are the only people that I have opened up to. It was good because I felt safe about sharing my stuff. [*Miromiro*]

Some of the women said that they were given information about how to heal using Māori frameworks, which helped them see that their healing process was important and beneficial for their *whānau* as well.

> Learning about being a mum was all that I had time for. But now I get out my booklet [Māori Women Support Group] and we are given the meaning of the baskets of knowledge and underneath we have how it relates to healing the gambling. So that just buzzes me out and I think, 'Oh is that what it is all about?' Then we have *Whare Tapa Wha* and it is like, 'Oh, I can understand it and work it out.' So now I understand where Māori concepts come into play a lot more with the healing and bringing it to our *whānau*, our entire Māori *whānau*, and that is all it is. I wasn't brought up to speak Māori or to practise Māori in the house or outside. [*Miromiro*]

> I have to say that getting involved with this group [Māori Women Support Group] was the best thing that I have ever done in a long, long time. [*Karearea*]

Another barrier to seeking help reported by participants was the tendency for non-Māori provider services to view their problem through a medical or

clinical lens. Some women noted there were doctors who were unaware of appropriate gambling help services in their regions, and felt the way to "fix" a problem gambling addiction was through administering medication. Participants described this practice as very unhelpful.

> When are those bald-heads gonna get it right! What made me mad was that negative talk about the labels for problem gamblers. Why does it have to be like that? I never went back for my next session — do you blame me? [*Pukeko*]

> I didn't want to be tagged with 'compulsive or pathological gambler.' We already know that we are not your usual gamblers, don't need it forced down our throats. I got pissed off and walked. [*Titi*]

Filling out a number of forms and feeling discriminated against when poor literacy skills dominated the session before intervention commenced was also considered unhelpful. Some of the women reported that the information provided on assessment forms needed to be more relevant and more easily understood.

> First, they make an assumption that you can read or understand all the information they need on that form they use — why all that paper work before the session commences? Why not after they have helped us get some help. I want, like budget advice or something to help relieve my stress levels. It sucks! [*Miromiro*]

Implications of the Findings for Intervention Development

For a small number of women who participated in the doctoral study, pokie machines which used Māori imagery, such as the "TikiTiki" were perceived as friendly and welcoming. The women sought out machines which used Māori iconology (in this case a symbol of good fortune) viewing these machines as somehow connected to them as Māori women. Of particular concern was the element of cognitive distortion that the machine talked back to one of the Māori women and kept her connected to her culture. This personification contributed to irrational thinking that, in turn, helped maintain the gambling behaviour. The participants also reported being captivated by the tranquilizing effects of the appearance, sounds, and kinaesthetic sensations associated with the machines (Volberg, 2001, 2003; Woollard and Gregory, 2002; Griffiths and Parke, 2003). It is clear from this study that there is a need for research on Māori involvement in gambling and the effects of iconology to reduce gambling harm. The research findings confirmed that the iconology of the pokie machines and the deliberate use of Māori graphics had a definite and negative impact on Māori women gambling behaviour.

In developing problem gambling services for Māori women, the study reinforced the need for services which are cognizant of Māori women's social, educational, and economic lived realities. It is clear from this study that there were limited gender and culturally specific services available for Māori women and their *whānau*. As a consequence Māori women were hindered in their efforts to seek help and find solutions to their problems; a finding consistent with other research (Compulsive Gambling Society, 1998; Richards and Blair, 2000; Richards and Herd, 2003; Payne, 2004).

At the conclusion of this study Morrison determined that an appropriate gambling harm minimization intervention for Māori women would not only provide cultural experiences, but would also involve women in designing strategies to address their gambling behaviour, and resources that would be effective and acceptably culturally therapeutic (Brown and Coventry, 1997; Masterman-Smith et al., 2001).

The proliferation of gaming venues accessible to Māori women will continue to draw those women vulnerable to a habit of gambling. As the operators of gaming venues increasingly target women and make their surroundings conducive to long stays, Māori women who gamble will face increasing problems associated with their activities. Morrison concluded that Māori women and their *whānau* need to be able to heal together, but this requires access to regional and local service providers in their towns and communities (Morrison, 2008).

No matter how well-aligned harm minimization models are with Māori values and principles, they will only successful if they are introduced into communities which have meaningful, authentic relationships between providers, health promotion

agencies, and communities; and a commitment to training health-promotion staff. Culture, and the ability to draw on their own traditional knowledge and expertise, is foundational to the success of such resource development in meeting community needs. Embracing traditional Māori beliefs and values and applying these values to contemporary problems provides the impetus for empowerment and the true meaning of partnership.

In the next part of the paper we outline the development of a culturally congruent resource and training intervention — the *Tu Toa Tu Maia* intervention.

Development of the *Tu Toa Tu Maia* Intervention

In December 2009, *Te Korokoro Rangahau Hauora*, a small research consultancy, was contracted to deliver the public health component of a problem gambling contract, funded by the Ministry of Health. *Te Korokoro Rangahau Hauora* determined that one of the first things they would produce under the contract was a health promotion resource for Māori women who gambled. Liaising closely with Dr Morrison, the service undertook to develop a resource that not only contained relevant information about the harms which can result from gambling but was also be culturally relevant, easy to understand, and aesthetically pleasing to Māori.

Using a Culturally Appropriate Process

Prior to starting the development of the resource, an advisory group was formed consisting of the general manager of TKHT, a general manager subcontracted by TKHT to deliver gambling counselling, and two *kaumatua* advisors. The purpose of the advisory group was to help collect comprehensive information about the agencies and networks in *Rotorua* working with gamblers or *whānau* members affected by gambling and to ensure culturally appropriate practices were upheld at all times. Integral to working with Māori communities is *whakawhānaungatanga* (making connections). In accordance with *tikanga* Māori (Māori protocols), *kanohi ki te kanohi*, or face-to-face meetings were held with the director and manager of the local Māori gaming trust and other key informants in *Rotorua* to discuss the production of a gambling harm minimization resource and gain support to promote the resource. Both the gaming trust director and manager approved training for their gaming staff and agreed to advertise the resource in the gaming venues.

The content and framework for the intervention and associated training resources developed by Dr. Morrison were presented for approval to TKHT and thus the "*Tu Toa Tu Maia*: A Safe Guide to Gambling in *Te Arawa*" intervention was formally established.

Piloting the Resource and Intervention

Once the resource had been approved by the TKHT, Dr. Morrison contacted a *kuia kaumatua* (elderly woman) from her *hapu* (subtribe) to provide feedback about the authenticity and cultural relatedness of the resource and whether the language used in the resource (both Māori and English) was appropriate for the intended audience. The resource was then presented to twenty *kaumatua* at the *Te Ao Marama* church hall in the village of *Ohinemutu* in *Rotorua*, who were also asked to provide feedback on the appropriateness of the intervention. Two *kuia* who gambled on the pokies confirmed that tiki imagery was appealing to Māori, the wording was clear, simple, and easy to understand. Others noted that the design was simple and eye-catching. Other *kaumatua* present also liked that it did not look like a "problematic" resource with negative connotations such as problem gambler.

Once the resources had been approved by local Elders, Dr. Morrison approached the key informants contacted earlier (including managers and staff providing services to people who may have been affected by gambling), to seek further comment and feedback on the resource. The intervention was therefore informed by contributions from people based at organizations such as health and social service providers, problem gambling providers, AOD (alcohol and other drugs) services, gaming venues, budget advice agencies, community members and *kaumatua*, as well as education services and other government departments.

The Intervention Checklist

In the doctoral research reported earlier, Morrison (2008) established a set of dimensions for the de-

velopment and presentation of the research process, which builds on Durie's (2001) recommendation of *marae* encounters as models for thinking and behaviour. Morrison further adapted these eight dimensions for the gambling harm minimization intervention where they are used to depict the stages, states, and warning signs of gambling harm on a one-page checklist (Morrison, 2010). The dimensions are outlined in Table 3, and include *Te Waharoa* — planning and preparation; *Karanga* — consultation and connections; *Marae-atea* — protection and safety protocols; *Whaikorero* — engagement; *Waiata* — ethical considerations; *Koha* — reciprocity; *Hariru* — establishing trust; *Hakari* — integration of information; *Te take o Marae* — formalizing or addressing the issues.

Table 3. *Tu Toa Tu Maia*: Checklist to Safe Gambling

Tu Toa Tu Maia — Safe Guide to Gambling	*Activities/Application*
Te Waharoa	Preparation is used to consider: • Have I covered all of my basic needs, such as *kai*, rent? • Have I paid all of my monthly necessities, phone, power, car, etc.? • Have I got enough money set aside to spend on gambling? • Have I set up appropriate childcare arrangements?
Karanga	Connections is used to consider: • Are my relationships good and do I have support to help me if I feel I am over gambling? • Do I know where to go to get help? • Can I be honest with myself and with *whānau*? • Have I lost the plot!
Marae-atea	Protection is used to consider: • Will my children be safely cared for? • What arrangements have I put in place if I lose track of time? • Who have I told which pokie bar/pub I will be at? • Does the venue where I gamble have host responsibility (will they help monitor my gambling if I ask them)? • Will I be supported to self-ban?
Whaikorero	Gambling behaviour is used to acknowledge: • Winning money, losing money, having a good time with your mates and *whānau*.... why worry? • But you've lost track of time. • You're borrowing money. • Your money for *kai* has been gambled away. • You're drinking too much, maybe drugging too much, and gambling too much. • And waiting for the "big one" — pay out.
Waiata	Signifies losing sight of reality: • Make light of your losses. • You get depressed about money and isolate yourself. • You drink and gamble a little bit more. • Everyone around me is doing it, what's the problem? • You get angry with the pokie machine, then take it out on your partner and *whānau*.
Koha	*Koha* is used to consider: • You keep telling yourself that the pokie machines will bring you gifts. • You start off with a *putea* and you keep hiding your losses. You share your wins with other gamblers. • You've had a big win and overcompensate by splashing out big time. • But it's false reality, you're poorer than before. • You keep telling yourself everything's going to be okay.
Hariru	Loss of *mana*: • You gamble in secret • Your gambling mates become more important than your *whānau*. • You run up big debts and steal to make up for your losses.
Hakari	When a "treat" becomes a necessity: • You gamble all the time, or whenever you can. • It's normal for you to gamble regularly. • You use household money to gamble. • Your relationships are affected. • Your health suffers. • Your work suffers

Te Take o Marae — Let's talk about the *kaupapa*

If you can identify with parts of the *Pōwhiri* and how you gamble, it could be that you have a gambling problem.

- □ Be smart in how you gamble, don't let the pokies rule your life
- □ Know your triggers and know when to stop or reduce gambling
- □ Talk to *whānau* or friends
- □ Get in touch with Mana Social Services or *Te Hunga Manaaki*
- □ Ring the Māori Gambling Helpline

Gambling can be fun but knowing when to stop is important for whānau ora.

Final Words

Whilst the intervention has yet to be evaluated in a community setting, positive feedback was received from both pokie owner operators and the staff of gambling venues about the content and aesthetic

of the flyer. Feedback includes that the flyer stands out because of its user friendly presentation and the use of Māori imagery. The development of the *Tu Toa Tu Maia* resource has contributed to other gambling harm minimization activities for the local health services, including the development by TKHT of a best practice approach to minimizing problem gambling harm and awareness-raising campaigns with Māori and non-Māori social, health, and mental health organizations. A further, unintended consequence of developing the intervention has been the call for regular "*kaumatua ora*" (Elder wellbeing) days for *kaumatua* in the area.

A further spin-off from the development of the intervention includes the support by three gaming trusts in *Rotorua* of training in the use of the intervention for staff in their gaming venues. Since developing the intervention Dr. Morrison has worked with local gaming trusts in *Rotorua* to help gaming staff understand the many complexities associated with Māori and gambling. A two hour training session has been developed for gaming venue staff, so that staff might confidently direct Māori women to the gambling checklist and intervention resources. There were 300 copies of the resource printed and distributed in the *Rotorua* area and beyond. Anecdotal evidence suggests that the resource and intervention has found favour amongst the government agencies that regulate pokie machines. This is a step further towards validating cultural congruence as a model that works and makes a difference in the lives of Maori.

The proliferation of easily accessible gaming venues will continue to draw in Māori women vulnerable to a habit of gambling. As the operators of those venues increasingly target women and make their surroundings conducive to long stays, Māori women who gamble will increasingly face problems associated with their activities within them. Māori women and their *whānau* need to be able to heal together, but to do so they must have access to regional and local service providers in their towns and communities.

Gambling is a significant problem affecting not only the lives Māori women, but also of their children and wider *whānau*. Gambling, and particularly gambling misuse, contributes to deterioration in household finances, individual and *whānau* health, personal relationships, and community wellbeing.

Both the doctoral work reported here, and the intervention developed from that study, have implications for Māori health policy and practice, and relevance for the wider field of international cross-comparative research on Indigenous gambling and mental health issues. Although the doctoral study included a relatively small, localized sample and cannot necessarily be generalized to the wider population of Māori gamblers, it makes a contribution to our understanding of why Māori women have problems with gambling, the difficulties their *whānau* have in helping them address those problems, and ways in which service organizations can better help women and *whānau* deal with the consequences of gambling. The development of a culturally congruent model of gambling harm minimization, which takes into account the lived realities of Māori women, has broad stakeholder buy-in and community support, and is informed by Māori cultural values is an important step towards reducing the harm that occurs in our communities from this pervasive and seductive habit.

Glossary of Māori Words

Hakari	Māori ceremonial meal
Harirū	Māori greeting, pressing of noses
Iwi	Tribe
Kāranga	Call
Kaumatua	Māori elder
Kaumatua ora	Elder wellbeing
Kaupapa	Strategy
Koha	Gift or donation
Kuia	Māori female elder
Marae	Traditional meeting place of Māori
Marae-atea	Courtyard
Pōwhiri	Welcoming ceremony
Te take o Marae	Discussion inside meeting house
Tiki	Maori symbol of good luck
Tikitiki	Name of pokie machine
Turangawaewae	Place of belonging
Te Pae Mahutonga	A Māori health framework
Te Whare Tapa Whā	A Māori health framework
Te Wheke	A Māori health framework
Te Waharoa	Gateway to *marae*
Waiata	Song
Whaikorero	Make a speech, oration

References

Abbott, M. (1998). *Problem Gambling in Aotearoa.* Paper presented at the National Workshop of Treatment for Problem Gambling. Auckland, NZ.

—— (2001). What do we know about gambling and problem gambling in New Zealand. Wellington, NZ: The Department of Internal Affairs.

Abbott, M., McKenna, B., and Giles, L. (2000). Gambling and problem gambling among recently sentenced women prisoners in New Zealand. Wellington, NZ: Department of Internal Affairs.

Abbott, M. and Volberg, R. (1991). Gambling and problem gambling in New Zealand. Wellington, NZ: Department of Internal Affairs.

—— (1992). Frequent gamblers and problem gamblers in New Zealand: Report on phase two of the national survey. *Research Series No 14* (Vol. 14). Wellington, NZ: New Zealand Department of Internal Affairs.

—— (1994). Lifetime prevalence estimate of pathological gambling in New Zealand. *International Journal of Epidemiology, 23*, 976–983.

—— (2000). Taking the pulse of problem gambling in New Zealand: A report on Phase one of the 1999 National Prevalence Study. Wellington, NZ: Department of Internal Affairs.

Adams, P., Morrison, L., McMillan, L., Orme, C., Sloan, M., Tse, S., and Campbell, C. (2003). Problem gambling workforce development 2003: The first step in developing counsellor practitioner competencies. Auckland, NZ: Problem Gambling Foundation of New Zealand.

Boulton A., Gifford H., and Potaka-Osborne M. (2009). Realising whānau ora through community action: The role of Māori community health workers. *Education for Health, 22*(2). Available from: http://www.educationforhealth.net/.

Brown, S. and Coventry, L. (1997). *Queen of Hearts: The Needs of Women with Gambling Problems.* Australia: Financial and Consumer Rights Council (Inc).

Compulsive Gambling Society. (1998). *National Workshop on Treatment for Problem Gambling: Finding a Foothold and Getting Started.* Paper presented at the National Workshop on Treatment for Problem Gambling: Finding a foothold and getting started, Auckland, NZ.

Durie, M. (1994). *Whaiora: Māori Health Development* Second edition. Auckland, NZ: Oxford University Press.

—— (1997). *Identity, Access and Māori Advancement:.* Paper presented at the The Indigenous Future Seminar, Auckland, NZ.

—— (1999). *Te pae mahutonga: A Model for Māori Health Promotion.* Palmerston North, NZ.

—— (2001). *Mauri ora: The Dynamics of Māori Health.* Auckland, NZ: Auckland University Press.

Dyall, L. and Hand, J. (2003). Māori and gambling: Why a comprehensive Māori public health response is required in Aotearoa/New Zealand. *eCommunity International Journal of Mental Health and Addictions., 1.*

Dyall, L. and Manaia, W. (2005). Powhiri and the Treaty of Waitangi: A Māori protocol framework for host responsibility. *International Journal of Mental Health and Addictions*, 8–14.

Dyall, L. and Morrison, L. (2002). Māori, the Treaty of Waitangi and gambling. In B. Curtis (Ed.), *Gambling In New Zealand.* Palmerston North: Dunmore Press.

Griffiths, M.D. and Parke, J. (2003). The environmental psychology of gambling. In G.R., ed., *Gambling: Who Wins? Who Loses?* New York: Promentheus Books.

Gruys, M.A., Hannifan, J.B., MacKinnon, S., and Paton-Simpson, G.R. (2000). Problem gambling counselling in New Zealand 1997–1999. Wellington, NZ: Problem Gambling Committee and Department of Internal Affairs.

Huata, P. (1998). *Healing our Spirits Rather than Treating the Disease.* Paper presented at the Healing our spirits, Rotorua.

Korn, D. and Shafer, H. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies, 15*(4), 289–365.

Masterman-Smith, H., Martin, S., and McMillen, J. (2001). Social and economic impacts of gambling in New Zealand. Sydney, AU: Australian Institute for Gambling Research, University of Sydney.

Ministry of Health. (2001). An integrated national plan for minimizing gambling harm. Wellington, NZ: Ministry of Health.

—— (2010a). Preventing and minimising gambling harm: Six-year strategic plan 2010/11–2015/16. Wellington, NZ: Ministry of Health.

—— (2010b). Preventing and Minimising Gambling Harm: Three-year service plan 2010/11–2012/13. Wellington, NZ: Ministry of Health.

Moewaka-Barnes, H. (2009). The evaluation hikoi: A Māori overview of programme evaluation. Auckland, NZ: Te Ropu Whariki, Massey University.

Morrison, L. (1999). *The Good and the Bad Times: Māori Women's Experiences of Gambling in Rotorua.* Masters Thesis, University of Waikato, Hamilton.

—— (2003). *Māori Women and Pokie Gambling: Friend or Foe?* Paper presented at the Third International Conference on Gambling: Gambling through a public health lens: Health promotion, harm minimisation and treatment. Auckland, NZ.

—— (2008). *Māori Women and Gambling: Every Day is a War Day!* Doctorate Unpublished Doctoral Thesis, Waikato, Hamilton. Retrieved from http://adt.waikato.ac.nz/uploads/approved/adt-uow20080822.151253/public/02whole.pdf.

—— (2010). Tu Toa Tu Maia: Be a winner! Safe gambling the Te Arawa way. In Te Kahui Hauora Trust, ed., *Health Promotion Pamphlet.* Rotorua, New Zealand: Advocate Printers Rotorua.

Patton, M. (1990). *Qualitative Evaluation and Research Methods.* Thousand Oaks, CA: Sage Publications.

Payne, G. (2004). The gambling problem helpline in New Zealand. In R. Tan and S. Wurtzburg, eds., *Problem Gambling: New Zealand Perspectives on Treatment.* Wellington, NZ: Steele Roberts in association with Pacific Resources Education Trust, pp. 52–58.

Pere, R. (1997). *Te wheke: A Celebration of Infinite Wisdom.* Gisborne, NZ: Ao Ake Global Learning.

Raeburn, J. and Herd, R. (2003). Te ngira: Gambling and public health — a workplan. Wellington, NZ: Problem Gambling Committee.

Richards, D. and Blair, D. (2000). Māori and gambling hui. Auckland, NZ: Problem Gambling Committee.

Richards, D. and Herd, R. (2003, June 19-21). *Working with Māori Women (South Auckland Project).* Paper presented at the Problem Gambling Symposium today's major social issues — the therapist's role, Waipuna Lodge Convention Centre Auckland, NZ.

Robertson, P., Pitama, L., Ahuriri-Driscoll, A., Larsen, J., Uta'i, S., and Haitana, T. (2002). A framework for development of gambling services for Māori in Te Rohe o Ngai Tahu. Christchurch, NZ: Hei Oranga Pounamu Ngai Tahu.

Robson, C. (1993). *Real World Research: A Resource for Social Scientists and Practitioner-researchers.* Oxford: Blackwell.

Stockdale, M. (2003). *Models of Care for Indigenous Clients.* Paper presented at the Problem Gambling Symposium Today's major social issues — the therapist's role, Waipuna Lodge Convention Centre, Auckland, NZ.

Sullivan, S. (1999). *The GP 'Eight' Gambling Screen.* Unpublished doctoral dissertation, University of Auckland, Auckland, NZ.

Sullivan, S., Abbott, M., McAvoy, B., and Arroll, B. (1994). Pathological gamblers: Will they use a new telephone hotline? *New Zealand Medical Journal, 107,* 313–315.

Volberg, R.A. (2001). *When the Chips are Down: Problem Gambling in America.* New York: The Century Foundation.

—— (2003). Has there been a "feminization" of gambling and problem gambling in the United States? Retrieved May 2003, from http://www.camh.net/egambling/issue8/feature/index.html.

Tauroa, H. and P. Tauroa (1986). *Te Marae: A Guide to Customs and Protocols.* Auckland: Reed Methuen Publishers Ltd.

Walker, R. (1990). *Ka whawhai tonu matou: Struggle without End.* Auckland, NZ: Penguin.

Watene, N. and Thompson, K. (2007). "Whakatau Mai Ra": The impacts of gambling for Māori communities — A national Māori collaborative approach. In N. Watene, ed., Hamilton, NZ: Te Rūnanga o Kirikiriroa Trust Inc.

Woollard, S. and Gregory, D. (2002). Market briefing research (pp. 1-18). Melbourne, Victoria: Tattersalls.

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