The commercialisation of kava in Vanuatu

ANITAJOWITT*

IENNY BINIHI**

Introduction

The use of kava is ritualised in custom in many of Vanuatu's societies, and often has considerable social and/or sacred significance. This traditional significance of kava has already been fairly well documented. In the urban setting of Vanuatu's capital Port Vila this ritualisation is no longer a dominant feature of kava consumption.

Instead people go to kava bars, or nakamals, and buy bowls of mixed kava to drink. These bowls are commonly known as shells because traditionally kava was usually served in coconut shells. Now Port Vila's kava bars normally use glass or porcelain bowls as their 'shells'. These shells usually come in two sizes, either 50 vatu (approx. 50 - 100 ml of liquid) or 100 vatu (approx. 100 - 200 ml of liquid). The quantity of liquid and the strength of the kava varies from kava bar to kava bar². In 1999 about 50 kava bars had been granted business licenses by the Port Vila Municipal Council, and it is estimated that between 70 and 80 kava bars are operating without licenses³.

Kava drinking has become a predominantly commercial activity in Port Vila. People sell kava to make money. People buy kava to drink recreationally. Most kava bars welcome anybody, male or female, regardless of traditional constraints on who can drink kava. The only limits on consumption are when the kava bar runs out of kava or the drinker runs out of money.

There are at least three good reasons for examining this urbanisation/commercialisation of kava drinking practices, these being:

*Lecturer. School of Law, University of the South Pacific, PMB 072, Port Villa, Vanuatu. Tel: 22 748 Fax: 27 785.**Unknown person not given by author.

- The changing approach towards the consumption of kava because of urbanisation may be able to give an insight on how custom is being affected by urbanisation.
- There is increasing concern about the effect that kava has on the health of drinkers. Sociological studies of long term and/or heavy kava drinkers will help to identify potential physiological effects of kava that may be of interest to medical researchers.
- 3. Kava drinking, as a significant social pastime, affects wider society. Drinking kava has also been promoted as a culturally and socially preferable alternative to drinking alcohol⁴. Any policy that promotes substance use should be carefully considered in light of the wider effects that the substance is having on society/the family, both in social and economic terms.

This paper reports the results of a pilot study that aims to provide empirical data on the above three facets of kava use. The study is based in Port Vila, Vanuatu's capital city and largest urban centre. It identifies avenues for future research and makes some preliminary conclusions in these areas. In this report we focus on our findings as regards the health issues surrounding kava use and the effects of kava drinking on the family (points 2 and 3 above). The information gathered about kava drinking patterns in urban Vila may provide indications of how traditional customs have changed in a commercial urban environment. However at this point we are not investigating the extent to which the traditional rituals of kava drinking have been transformed to adapt to an urban environment. Rather our discussion of kava drinking patterns in Port Vila is included to provide information on the nature and extent of our sample population's kava drinking habits.

Methodological notes

This study is based on information gathered from questionnaires that were distributed in Port Vila in early 1999. Two questionnaires were prepared, one for kava drinkers and one for non kava drinkers. The kava drinkers questionnaire sought to identify:

- ☐ the reasons why people drink kava;
- patterns in kava drinking and whether these altered as people became increasingly urbanised;

Table 1. Breakdown of gender and ethnicity of respondents							
	Total # of respondents	Total # of males	Males by ethnicity	Total # of females	Females by ethnicity		
Kava	115	76	67 ni-Vanuatu	30	25 ni-Vanuatu		
drinkers	113	70	9 Expatriate	39	4 Expatriate		
Non	40	1.4	11 ni-Vanuatu	2.4	30 ni-Vanuatu		
drinkers	48	14	3 Expatriate	34	4 Expatriate		

- □ how kava drinkers perceive that kava affects their health;
- how kava drinking relates to cigarette and alcohol consumption:
- □ how kava drinking affects diet,
- how kava drinkers perceive that kava affects family life:
- ☐ how much money is spent on kava;
- □ how kava drinkers afford to buy kava, and
- □ whether kava drinkers perceive drinking kava outside of urban kava bars to be a different experience to drinking at urban kava bars.

The non kava drinkers questionnaire was fairly brief. The information it gathered was largely intended to be used as a comparison with the kava drinkers. It sought to identify:

- ☐ the reasons why people did not drink kava.
- the amount of alcohol consumed by non kava drinkers.
- the amount of cigarettes smoked by non kava drinkers:
- how non kava drinkers perceive kava to affect peoples' health, and
- ☐ how non kava drinkers perceive that kava affects family life.

Each questionnaire also asked for information on various 'indicators of urbanisation', including education levels, the time that people had been in Vila, their income levels and the nature of employment undertaken. In addition we requested information on peoples' islands of origin and place of residence in Vila. This data was used

to identify any factors in the sample population that may make it unrepresentative of the population in Port Vila.

All of the data gathered by these questionnaires is based upon self-reports. No steps were taken to validate the respondents' reports of their habits, particularly in respect of the levels of kava, alcohol and cigarette use.

Surveys were distributed randomly in early 1999. Fortyeight valid non drinkers questionnaires and one hundred and fifteen valid kava drinkers questionnaires were received. Until the population census at the end of 1999 is undertaken it is hard to estimate accurately what the population of Port Vila is and what its characteristics are in terms of education and income levels, occupations, islands of origin and length of time in Vila⁵. Without any accurate statistics to compare our sample population with to see if it is representative it nevertheless appears that the sample that this paper is based upon is fairly wide ranging in terms of the respondents' places of origin and places of residence within Vila6. Women kava drinkers are under-sampled possibly because cultural constraints often prevent women from publicly drinking, or admitting to drinking, kava. Expatriates were included in the sample population because they (usually) have no cultural tradition of drinking kava. They therefore represent 'purely commercial' kava drinkers. In many places however the expatriate and ni-Vanuatu populations have been analysed separately.

The one area in which our sample population is clearly not representative is in the levels of education of the respondents. In 1989 only 1% of the total ni-Vanuatu

Reasons for drinking kava	% that rate the reason as being their #1 reason for drinking kava*	% that rate the reason as being one reason for drinking kava	
I like the effects	50.4	77.4	
I meet my friends over kava	28.7	71.3	
I can meet new people	11.3	47.8	
for customary reasons	9.6	36.5	
To lose weight	9.6	33	
To get out of the house	7	42.6	
To find out news	43	41.7	

^{*}Some respondents selected more than one #1 reason for drinking kava, which is why this column totals more than 100%

Table 3. Responses to the survey question What do you like about the effects of kava?					
What do you like about the effects of kava?	% of total group identifying with each option				
It helps me relax	89.5				
It reduces worries	51,8				
It makes me feel part of Vanuatu	25.4				
It makes me think differently	14				
It slows down my thinking	14				
It affirms cultural identity	17.5				
Other	7				

population (rural and urban) had obtained either a senior secondary certificate, diploma or degree.⁸ Although those with qualifications were grouped in the urban areas⁹ and the number of people who have obtained qualifications has greatly increased in the past 10 years, our respondents are drawn from the better educated sectors of society, with 71.6% of the ni-Vanuatu kava drinkers and 85.3% of the ni-Vanuatu non kava drinkers having obtained either a senior secondary certificate, diploma or degree.

Despite the fact that our sample population is skewed towards more highly educated people than is the urban average the findings of the pilot study still indicate trends amongst urban kava drinkers. It should, however, be remembered that the less educated sector of Port Vila is not well represented by this study.

Kava drinking patterns in Port Vila

Our survey did not aim to gather data on the percentage of people who drink kava in Port Vila. However, it did identify patterns in the sample of kava drinkers surveyed. Our results suggest that 'getting kavaed', or feeling the effects of the drug is the predominant reason for drinking kava. Custom, whilst it is a reason for drinking for some of the respondents, does not feature particularly strongly as an incentive to drink kava.

The questionnaire asked drinkers to rank given reasons for drinking in their order of preference. The table below indicates the drinkers' responses, both in terms of what each drinker's #1 reason for drinking kava was, and the percentage of people who ranked a response as being a reason of any ranking. The responses between expatriates and ni-Vanuatu as to their reasons for drinking kava were not significantly different.

The things that people identified as liking about the effects of kava also reflected its secular rather than sacred aspects, with relaxation being the main effect that people liked about drinking kava.

Again the expatriate and ni-Vanuatu respondents tended not to differ in their reasons for drinking. However, it was the expatriates who most tended to link kava with the identity of Vanuatu, with 56.6% of the expatriates saying that one of the effects that they like about drinking kava is that it makes them feel part of Vanuatu, as opposed to only 14% of the ni Vanuatu respondents. This might be explainable on the basis that the majority of ni-Vanuatu, having not traveled, are not so aware of the uniqueness of kava to Vanuatu. However, the fact that the majority of respondents did not link the drinking of kava to their cultural identity suggests that in Port Vila's kava bars, the use of kava for traditionally sacred purposes such as to communicate with ancestors or spirits⁹ is not of much relevance to most drinkers.

These responses about the reasons for drinking indicate that, in Port Vila kava bars, drinking kava has become secularised. Further questions indicated that, drinking outside of kava bars, whether making kava at home or purchasing kava to take away from the kava bar, is also a largely a secularised activity. A large portion of kava drinkers (69.6% of the total group, 82.6% of the expatriate sub group) do purchase kava to drink outside of kava bar. Most people drink takeaway kava fairly regularly, with 61.25% purchasing takeaway kava 1 or 2 times each week, 15% purchasing takeaway 3 or more times a week and only 23.75% purchasing takeaway hardly ever/only for special occasions.

Forty six percent (46%) of the total group occasionally prepare kava themselves to drink outside of the kava bars. People do this much less frequently than they buy takeaway kava, with 67.9% of the kava preparing sub group preparing their own 'hardly ever/only for special occasions'.

There are more likely to be customary aspects to drinking kava outside of kava bars. However, whether drinking in a kava bar, buying takeaway kava to drink outside of a kava bar or preparing ones own kava, the predominant reasons for drinking are not related to custom or tradition. This means that kava use in Port Vila is increasingly unlikely to be subject to customary re-

Table 4. Reasons for drinking kava outside of the kava bar						
Reason for getting/making kava to drink outside of kava bar	% of takeaway drinking sub group that drink takeaway kava for this reason	% of kava preparing sub group that prepare their own kava for this reason				
To drink at parties/gatherings	53.2	64.6				
For customary reasons	20	39.6				
It is cheaper	n/a	31.3				
For fundraisings	18.9	25				
To get away from the atmosphere of the kava bar	22.8	10.4				
To be at home with the family	35.4	18.8				
To finish off an evening after drinking kava at the kava bar	31.6	n/a				
Other	15	22,9				

straints. The total lack of customary methods of controlling drug consumption has been suggested to be the reason why kava has become a drug of abuse amongst Australian Aboriginal communities despite the having been used by Pacific Islanders for centuries without any signs of abuse. The 'law of alien poisons', that "poisons are far less dangerous to the natives of the country in which they are grown than they are to people of other countries" seems equally applicable to urbanised ni-Vanuatu who are no longer using kava traditionally. Any concerns amongst health workers in Australia that kava is being consumed non-traditionally and is therefore open to abuse are just as valid in the urban areas of Vanuatu, where custom no longer operates effectively to regulate drinking.

The data gathered on the amount of kava that people drink suggest that kava is being used in urban Vanuatu to the same extent as it is amongst kava drinking Aboriginal communities in Australia.

The figures above indicate that, although most people do drink moderately, there is a considerable portion of the population that can be considered to be drinking heavily. In a previous study by Mathews et al of Aboriginal kava drinkers in Arnhem land that identified possible negative health effects of kava consumption very heavy drinkers were defined as those who used 440g/week of powdered kava. Heavy users used 310 grams/week, and occasional users were defined as those who use 100 g/week. 12 100 grams of dry powder is equivalent to about

500 grams of the fresh root that is usually drunk in Vanuatu, and this quantity of fresh root will contain between 10 - 15 grams of kava lactone.¹³ As noted earlier the amount of fresh kava that is used to mix prepared kava is not standardised amongst the kava bars in Port Vila. However, based on an approximation that 1 kg of fresh root is used to make ten good 50 vatu shells of kava.¹⁴ Thirty seven drinkers surveyed fall into the 'very heavy users' category defined by Mathews et al, forty two fall into the heavy users category and fifty five fall into the occasional users category.

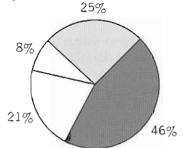
These figures indicate that first, assumptions made by Australian researchers that negative health effects of the consumption of kava in Pacific Islands have not been recorded because Pacific Islanders consume less kava are not accurate, at least in respect of urban Vanuatu.¹⁵ Second, if negative health effects related to the drinking of kava in itself are conclusively identified amongst the kava drinking communities of Arnhem Land, they will be directly relevant to the kava drinking communities of Port Vila, and vice versa.

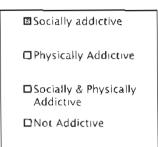
Health issues surrounding kava use

Reports have repeatedly stated that there has been insufficient research undertaken on the effects of long term or heavy kava drinking. Although most researchers agree that kava causes dry skin, there seems to be a divergence of views about other aspects of drinking.

Amount of 50 vt shells	# times/week that kava is drunk			
drunk/night	1-2	3-4	5-6	7
1.3	31	8	1	0
4.6	16	35	9	5
7-8	Ţ	4	6	4
9+	5	2	3	4

Fig 1. Perceptions of the addictiveness of kava





This study examined how kava drinkers themselves perceive kava to affect them. It also examined how kava drinking relates to the consumption of cigarettes and alcohol - the two other drugs most commonly used in Vanuatu.

The addictive qualities of kava

Whether kava is addictive is an issue on which other sources, both medical and sociological/anthropological, do not agree. Our questionnaire asked kava drinkers to identify whether they thought that kava was physically addictive (producing physical symptoms if the drug is not used) or socially addictive (where a psychological/mental compulsion exists to drink kava, this compulsion being determined by the perceptions of the user). The response suggests that the majority of kava drinkers do perceive kava to be addictive. See Fig. 1.

The amount that people drink does not appear to affect peoples' perceptions of whether kava is addictive. Rather, heavier drinkers appear to be slightly less likely to perceive kava to be addictive. Of the drinkers who fell into the categories of heavy or very heavy drinkers as defined by Mathews et al above, 44% believe kava to be socially addictive, 18% believe kava to be physically addictive, 8% believe it to be physically and socially addictive and 30% believe that it is not addictive.

Whether kava is physically addictive is a matter for medical research. However, the indication that kava use is 'socially addictive' has significance for social scientists examining kava use. The term 'socially addictive' is not very precise although it can be aligned with the psychiatric concept of psychological dependence. Any substance that is addictive, whether physically or psychologically, is at risk of being abused. The clear indication that people do find kava to be psychologically addictive suggests that researchers looking into the effects of long term kava use should be considering using recognised psychiatric standards to identify the extent to which kava users can be classified as being dependent upon kava or being abusers of kava.¹⁶

General perceptions of the health effects of kaya

The perceived health effects of kava other than aspects of addiction were generally unsurprising. 69.4% of the kava drinkers believed that kava affected health. The specific ways in which kava was seen to affect health is shown in the table below. Non kava drinkers had a far more negative perception of the effect of kava on health, with 91.6% believing that kava affects health. This is also reflected in their reasons for not drinking kava with 39.5% stating that health is one of the reasons that they do not drink and 25% stating that the fact that kava bars are dirty is one of the reasons that they do not drink. See Table 6.

People classified as heavy or very heavy drinkers did not differ from occasional users in their perceptions of the health effects of kava. The self-perceptions of heavy kava drinkers do not 'prove' that greater quantities of kava have no more effect on peoples' health than more moderate quantities. Rather, particularly as medical evidence establishes that heavy drinking of kava does at least have the effect of causing dry skin, it may indicate that heavy kava drinkers exhibit traits of substance dependence, by

Health effects	Perceptions of kava drinkers (% total group)	Perceptions of non kava drinkers (% of total group)		
Eat Less	60.8	66		
Smoke More	41.8	477		
Nausea	24.1	27.3		
Lazy/slow the next day	59.5	70.5		
Dry Skin	48.1	90.9		
Other	13.9	n/a		

denying the negative health impacts of the substance that they are consuming.

Further questions in the areas of diet, cigarette consumption and alcohol consumption were also asked, to identify if there were any negative health factors in the lifestyle of kava drinkers and whether these factors were related to, or affected by, the drinking of kava.

Diet

Although kava is being marketed by some drug companies as a weight loss aid, and other researchers have identified a correlation between loss of body weight and kava consumption¹⁷ the effects of drinking kava on peoples' diets and the flow on effects that this has on health has not been properly documented. However, if kava is making a significant amount of people eat less (20% of respondents said that they did not eat at all in the evening after drinking kava) this may be preventing kava drinkers from maintaining a healthy and adequate diet.¹⁸ This, combined with the diuretic effect of kava, could mean that kava drinkers are more susceptible to illnesses related to deficiencies in the diet.

Dietary reasons and dehydration quite possibly provide the answer to why some people are more susceptible than others to dry skin from kava. It may also help to explain why people 'are lazy the next day', or are a bit slower in their actions after a night of drinking kava.¹⁹

Kava drinking and cigarettes

Further questions about how many cigarettes people smoke on a kava drinking day as compared with a non kava drinking day indicate that smoking and kava drinking are related activities. The amount of kava drinkers that smoke as compared with the amount of non kava drinkers that smoke also indicate that there is a relationship between the kava drinking population and the smoking population. Only 34.5% of the kava drinkers group do not

smoke cigarettes at all, compared with 91.7% of the non kava drinker group. See Table 7.

With most people kava drinking does cause an increase in the amount of cigarettes that people smoke. The kava drinkers group also tend to smoke quite heavily. The relationship between smoking and kava drinking indicates that, in any research on the negative effects of long term drinking of kava on the health, the extent of cigarette smoking in the kava drinking research subjects should always be considered. This will avoid the danger of 'blaming' kava for the ill effects of cigarette smoking. Additionally, the relationship between kava and cigarettes and the apparent trend to smoke more when drinking kava is an issue that should be taken into account by researchers investigating the health effects of kava drinking.

Kava drinking and alcohol

There also appear to be correlations between who drinks alcohol and who drinks kava, with 73.9% of the kava drinkers saying that they drink alcohol, as compared to only 31.25% of the non kava drinkers.

Kava drinkers also consume alcohol more regularly than non kava drinkers, with all but two expatriates out of the non kava drinking sample population drinking once a week or less. The kava drinking population surveyed did not indicate that kava drinkers are heavy users of alcohol however, with 65.5 % saying that they drank once a week or less. The majority of the kava and alcohol drinking population (57.7%) spend 1000 vatu a week or less on alcohol 31.8% spend 2000 vatu or more on alcohol each week, with 15.4% of the total alcohol and kava drinking group spending more than 5000 vatu each week on alcohol.

As with cigarettes, any studies on the long term effects of drinking kava should consider the alcohol consumption profiles of kava drinkers, because again there appears to

Cigarettes smoked	Cigarettes smoked on a kava drinking day							
on a non kava drinking day	none	1-3	4-6	7-10	10-15	About 1 pack	1 pack	
None	36	4	6	3'	4	0	0	
1-3	2	4	9	7	ų	1	0	
4-6	0	1	2	4	2	0	0	
7-10	1	1	1	1	2	1	0	
10-15	Ű	0	Z	0	3	ſ	0	
About I pack	0	0	0	O,	0	5	5	
1 Pack +	0	0	0	0	0	2	2	

Table 8. Perceived effects of kava drinking on the family						
Effects of Kava on the family	% Non drinkers agreeing with the statement	% Drinkers agreeing with the statement				
Takes \$ Away	93	80.4				
Reduces family time together	93	78.3				
Reduces violence	9	19.6				
Provides a family activity	9	19.6				
Causes conflict	88	52.2				

be a correlation between the use of the two substances.

The effect that kava drinking has on alcohol consumption is another area that kava researchers have conflicted upon. There two predominant views about the relationship between kava and alcohol. The first, most prevalent view, is that drinking kava reduces the consumption of alcohol (and should therefore be encouraged as an alternative to alcohol). The second is that people tend to move from kava bars to alcohol bars to finish off their evening with an alcohol chaser, therefore increasing their alcohol consumption (a practice known as kale in Bislama).

The results of our study did not conclusively support either view about the relationship between kava and alcohol, although 69.6% the kava and alcohol drinking respondents ('the sub group') indicated that kava does affect alcohol consumption. The main effect that kava has on the amount of alcohol that this sub group consumes was identified as being that kava causes a decrease in the amount of alcohol drunk (a statement that 88.2% of the sub group agreed with).

Sixty seven percent (67%) also responded that they usually drink after kava. Personal observations indicate that when alcohol is drunk after kava it is usually drunk to 'settle the kava', or to calm the stomach and wash the mouth after finishing a kava drinking session. When used in this way, only small quantities of alcohol are drunk. This would explain why, although people drink alcohol after kava, the amount of alcohol being consumed is still being reduced below the amount that would have been drunk had no kava been consumed. Further, because most

people drink kava more often than they drink alcohol, the survey question may have been interpreted by some respondents to mean "if you are drinking alcohol, when would you usually drink it?" rather than "do you usually drink alcohol after kava?"

Whether these personal observations can be more widely supported by data is a matter for further investigation. However, the data collected does challenge the commonly held presumption that kava reduces alcohol consumption. Any official or unofficial policies of encouraging kava as a substitute for alcohol need to conclusively establish how kava and alcohol interrelate before proceeding.

The social and economic effects of kava drinking on the family

The majority of our sample population did perceive that kava affects the family, with 82% of the kava drinking population and 89% of the non kava drinking population agreeing with this statement. Whilst it is popular fore that the drinking of kava reduces the level of crime, particularly domestic violence²⁰, our data suggests that the effects that kava drinking has on the family unit are not particularly positive, as Table 9 indicates.

Non kava drinkers clearly perceive kava to have greater negative effects on family life than do drinkers, probably because they are the ones who remain at home whilst other family members go out drinking kava (two thirds of the non kava drinkers lived with at least one kava drinker). However, within each group perceptions of the effect

Number of			Average tim	ne spent at t	he kava bai						
days/week spent at kava bar	<1 hour	Approx I hour	Approx 2 hours	Approx 3 hours	Approx 4 hours	Approx 5 hours	> 5 hours				
1-2	14	13	18	3	3	0	0				
3-4	2	6	6	9	2	2	1				
5-6	2	4	5	4	1	0	3				
7	2	0	4	1	1	1	3				

\$ spent on . kava/week	Income/month (in 1000's)								
	0-5	5 - 15	15 - 30	30-50	50-75	75- 100	100+		
0	0	0	0	0	1	0	0		
<500	4	0	4	6	5	2	6		
500 -1000	6	3	6	5	4	4	4		
1000-2000	6	3	6	3	2	4	4		
2000 - 3000	0	1	3	0	0	3	4		
3000 · 5000	1	0	0	1	1	0	2		
5000+)	1	2	0	0	0			

This table reports the number of respondents in each category, not percentages

that kava has on the family do not vary significantly according to peoples gender, or any of the indicators of urbanisation.

The comments made by participants in the study in response to the questions on how kava affects the family suggested that conflict is caused because of the amount of time that is spent in the kava bar (usually the amount of time that the husband spends away from the family) and/or because of the money spent at the kava bar. A number of the comments provided support for personal observations that violence is sometimes the ultimate outcome of this conflict.

The time that some families spend apart because of the hours that kava drinkers spend time in the kava bar is quite significant. See Table 9.

Children are usually not seen in kava bars, so, in families with children at least one family member will not be at the kava bar. The fact that conflict is caused when some family members go out for long periods almost every evening is not very surprising.

Some of the comments also suggested that conflict over kava drinking is caused because of perceptions that men going to the kava bar too frequently encourage the women remaining at home to commit adultery. This source of conflict relates to the time that men spend in the kava bar without their wives, and also the fact that heavy usage of kava may cause impotence.²¹ Additionally, because women go to kava bars in Port Vila, it is believed that there are more opportunities for both kava drinking men and women to commit adultery. The kava drinking women, who are stepping out of their customary role, were often perceived as being morally loose in comments on the questionnaires, and kava bars were seen by a number of respondents as being places where prostitutes are to be found.²²

The concerns about the money spent on kava can be further supported by the statistics comparing how much

people spend on kava each week compared to how much they earn each month. See Table 10.

Once it is taken into account the money that some kava drinkers will be spending on cigarettes and alcohol, only a small percentage of many peoples' pay packets will actually be going to support themselves and their families. This creates a significant social problem. Such behaviour is also indicative of substance dependency or abuse.²³

The trends indicated by this data suggest that in Port Vila, where kava is indigenous and so is not considered to be an 'alien poison', it is being used in such a way as to cause serious negative impacts on some families. Any Pacific Island countries that have a culture of drinking kava commercially should consider the potential social impacts of kava to be an issue of concern that should be further investigated by the relevant authorities to see whether steps need to be taken to try to moderate the impact that kava drinking may have upon society.²⁴

Conclusions

Whilst the findings in this paper are only based upon a pilot study, and so are not conclusive, this study has identified a number of interesting issues relating to kava use in the commercialised environment of Port Vila. In particular the following aspects are findings worth considering:

- Kava drinking in Port Vila is no longer particularly subject to traditional restraints. As such kava is at greater risk of being abused than it otherwise has been traditionally.
- 2 Psychological addiction is a risk related to kava use. Any substance that is addictive is more likely to lead to dependency or abuse. Research using models of addiction as its framework would therefore be a fruitful avenue to explore in investigating kava use.
- 3. Kava use is related to the use of other substances

(tobacco and alcohol). In any research on the health effects of kava the correlation between kava use and the use of other substances should be taken into account.

- Kava does seem to affect the diet, making this another area to be considered when investigating the effects of kava on drinkers' health.
- 5. Kava usage does appear to have negative social impacts, particularly if a large amount of time is spent drinking kava. This is an urban social issue that needs to be further investigated to identify whether any steps need to be taken to moderate the impacts of kava drinking in urban Vanuatu.

Acknowledgments

The authors wish to acknowledge the help of the many people who assisted us in the gathering of the data and the writing of this paper. In particular we would like to thank Francis Hickey of the Vanuatu Cultural Centre and Alecks Collingwood of the Vanuatu Statistics Office.

References

- 1. The following publications provide a wealth of information and references to other sources on the traditional use of kava in Vanuatu. Lebot, Merlin & Lindstrom Kava The Pacific Drug 1992 Michigan: Yale University Press; Brunton, R. The Abandoned Narcotic 1989 Great Britain: Cambridge University Press, Lebot, V. Kavas of Vanuatu: Cultivars of Piper Methysticum forst Technical Paper No 195, South Pacific Commission, Noumea, 1988
- 2. The factors affecting the strength of mixed kava are outlined in Alexander, K Kava in the North: A study of kava in Arnhem Land Aboriginal Communities 1985 Canberra: Australian National University at p 4-5, and include the age and type of the kava plant and the amount of water used in the mix.
- Personal communication between Jenny Binihi and Stanley Toan Vice Town Planning Officer
- 4. Lebot, Merlin & Lindstrom supra n 2 at p 176
- The last census was in 1989. Although projections of population growth have been done since then these projections do not provide information on the nature of the population of Port Vila.
- 6. We have respondents from 12 different islands in Vanuatu, and from each of the provinces. However, because we have not identified how many people from each island have relocated to Vila we are currently unable to establish whether we have over- or under-sampled from any particular group. Our data on places of residence indicates a similar spread.
- 7. Vanuatu National Population Census May 1989, Main Report 1991 Port Vila, Statistics Office at p 46
- In 1989 56.7% of urban males and 52.3% of urban females had some qualifications as compared with only 30.4% of rural males and 27.4% of rural females. (ibid at p 45) The

- 1989 census also indicates that 16.7% of people living in Vila had had 11+ years of education, compared with only 2.7% of the rural population. (ibid, p 120)
- 9. Lebot, Merlin & Lindstrom, supra n 2, at pp 152 155
- ie Cawte, J "Parameters of Kava Used as a Challenge to Alcohol" Aus & NZ Jour Psych (1986) 20, 70 - 76
- Schenk, G. The Book of Poisons 1956 London Weidenfeld & Nicolson at p105
- Mathews et al "Effects of the Heavy Usage of Kava on Physical Health: Summary of a pilot survey in an Aboriginal community" (1988) 148 The Medical Journal of Australia 548 at p 548
- 13. Lebot, Merlin & Lindstrom, supra n 2, at p 200
- Other estimates have suggested that 1 kilogram of fresh kava is used in Vanuatu to make "6 good serves" of kava. (Lebot, V. supra n 2 at p 122)
- 15. No studies in respect of the amount consumed in rural Vanuatu, where kava drinking is likely to be more subject to traditional constraints, have been carried out. Therefore it is not known whether these traditional constraints limit the amount consumed, or only limit who is allowed to drink kava.
- 16. Levinthal has adapted to American Psychiatric Association's criteria into a 'check list' of factors to determine whether someone has a condition of substnace dependence or of substance abuse. (Levinthal, C. Drugs, Behavior and Modern Society 1996 United States Allyn & Bacon Ltd, at p 41) Personal observations suggest that using a checklist such as this would provide interesting results as to the extent of kava addiction leading to abuse.
- Mathews et al (supra n-13) documented weight loss averages of 20% of body mass and 50% decreases in subcutaneous fat amongst kava users.
- 18. Our questionnaire did not gather data on whether kava makes people eat less throughout the day or just after kava, and whether people compensate for their diet on 'kava days' by eating more at other times.
- 19 Alexander suggested that, amongst Aboriginal communities, this slowness may well be the result of staying up late to drink kava, (Alexander, supra n 3 at p 21) However, in Vanuatu, where the majority of people drink around dusk and do not spend all night at the kava bar, this tiredness cannot simply be explained as lack of sleep.
- Harcombe & O'Byrne Vanuatur Lonely Planet Travel Survival Kit (2nd ed) 1995 Australia. Lonely Planet at p 85; see also Alexander supra n 3 at p 20
- Lebot Merlin & Linstrom document this effect of kava use. (supra n 2 at p 136)
- The questions asked about women drinking kava generated a number of strong comments that can be differentiated on gender lines. Further analysis is currently being done on the data and what it reflects about how gender, custom and kava in urban society interrelate.
- 23. Levinthal supra n 17 p 41
- 24. This same question has been asked in Australia. See for example Mathew et al supra n 13, Cawte supra n 11.