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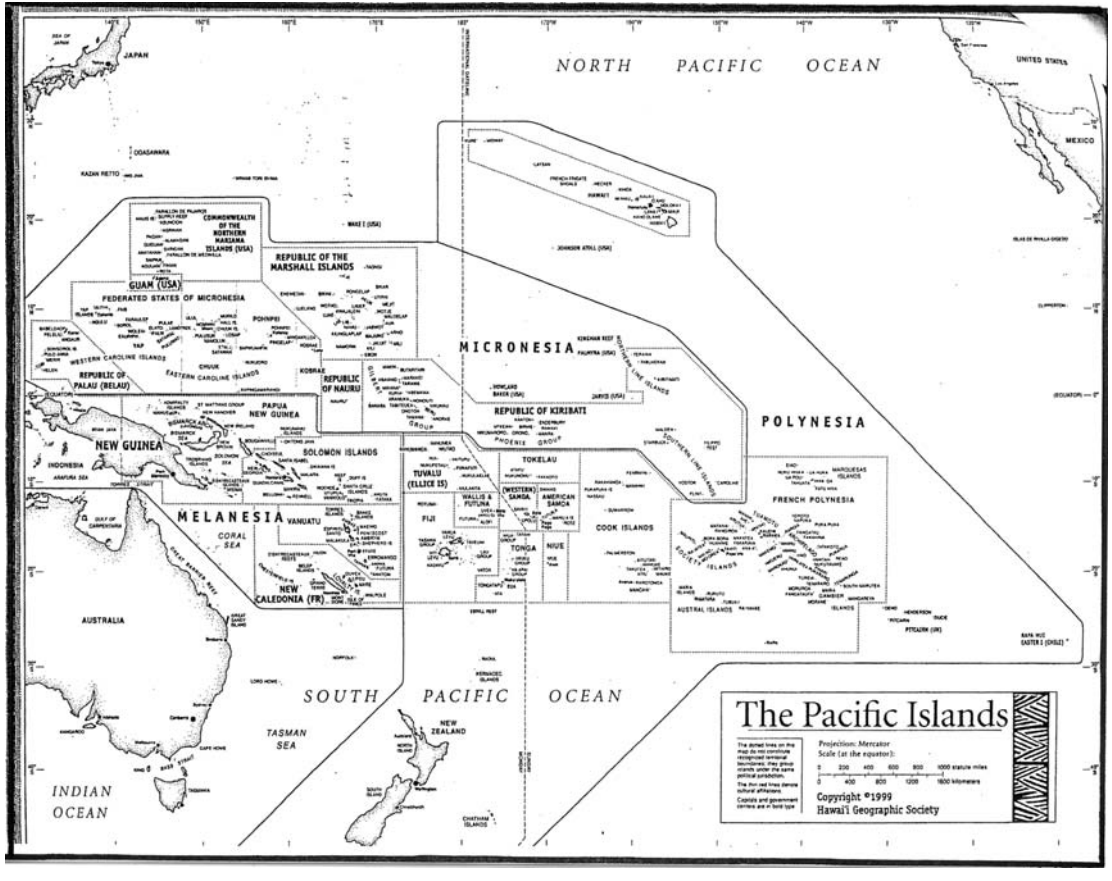
With Respect and Admiration

To Albert B. Robillard and Divina Robillard
For Courage, Dedication, and Scholarship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Preface

This volume is the product of an international gathering of scholars and health professionals in Honolulu, Hawaii, for the specific purpose of documenting and understanding the wide-ranging psychosocial consequences of rapid social change among people of Pacific Island nations. In the wide expanse of the Pacific Ocean, there are scores of nations and an untold number of cultural traditions. This area has been the scene of rapid social change since the Pacific Island people began contact with the Western and Eastern worlds through exploration, commerce, and religious missionaries. These changes led to the collapse and decimation of many groups as challenges to traditional ways of life soon exceeded their capacity to endure and survive.

Today, from Australia's Aboriginal peoples in the South to the Hawaii's Native Hawaiian (Kanaka Maoli) people in the North, there is a resurgence of cultural pride and efforts to renew ties with past. From Polynesia (e.g., Hawaii, Samoa) to Micronesia (e.g., Chuuk, Pohnpei, Palau) to Melanesia (e.g., Solomon Islands, New Guinea), the indigenous people of the Pacific are continuing their struggle to survive amidst a rapidly changing world in which basic and fundamental values and life styles find themselves in conflict with ways of life that emphasize alien values such as individuality, materialism, competition, and change. These words are not meant to idealize the traditional cultures of the Pacific Island people for they have often been characterized by aggression, hostility, and destruction of one another in the course of their history. Yet, it is clear that never has there been such so many and so potent external forces challenging their existence.

Westernization can now be found throughout the Pacific Islands with the exception of a few isolated regions in Melanesia and Micronesia. From clothing, to food, to religions, to the presence of new economies, the

changes occurring are many and are rapid. The result—both directly and indirectly—has been the onset of numerous psychosocial problems ranging from substance abuse to suicide—the social pathologies. Family violence, divorce, crime, alcoholism, drug use, and sexually transmitted disorders are now virtually omnipresent in rising levels. These problems are found at especially serious levels among youth and young adults.

The present volume offers an overview of these conditions across a sample of Pacific Islands nations and cultural groups that include aboriginal areas of Northern Australia, various groups in Guam, and Fiji, Micronesians from Chuuk, Pohnpei, and the Marshall Islands, Native Hawaiians, and Solomon Islanders. While this limited number of groups in this volume can no way can be considered representational of the conditions or circumstances among the numerous nations and cultural groups of the Pacific Islands, they can offer examples that capture the complexity of the past and present forces that have shaped the Pacific Nations and the consequences that often arise as cultures encounter one another and become cultures in transition.

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February 10, 2005

The opinions and views suggested in this book do not necessarily represent those of the Substance Abuse and Mental Health Service Administration which funded the conference.

Acknowledgements

The editors wish to acknowledge the many contributions that have been made to the completion of this volume by the various chapter authors and their supporters. We are grateful for your cooperation and for your dedication to the completion of the volume. In this collection of pages, the people of the Pacific Islands will find strong and articulate voices sharing common experiences and hopes. Our deep appreciation is also extended to Joyce Liu for her administrative and editorial assistance. Joyce was instrumental in organizing and conducting the conference upon which this volume is based and assisting in bringing the volume to press. The editors also wish to thank Sharon Panulla, Psychology Editor for Springer Publications, for her interest and support. Her extensive publishing knowledge helped inform all phases of the volume. Anne Meagher, Production Editor for Springer Publications, also played an invaluable role in the publication of this volume. Her combination of technical skills and personal patience were needed throughout the publication process. For these we are very grateful. We also wish to thank Professors Robert Kiste and Britt Robillard of the University of Hawaii for sharing their vast store of knowledge on Pacific Island cultures at various stages in our effort. Our gratitude is also extended to Father Fran Hezel, SJ, who is internationally recognized as one of the foremost scholars on Micronesia. Father Hezel's extensive knowledge and wisdom informed many of the chapters. Without these many people, this volume would not have been possible.

Contents

Chapter 1
Introduction

Anthony J. Marsella, Ayda Aukahi Austin,
and Bruce Grant

> The time has come, the walrus said, to talk of many things; of shoes, and ships, and ceiling wax, and cabbages and kings; and why the sea is boiling hot, and whether pigs have wings?
>
> *Through the Looking Glass* (1872)
> Lewis Carrol
> (1832–1898)

BACKGROUND

The Pacific Island and Oceanic nations are home to indigenous cultures that are thousands of years old. The indigenous people of the Pacific flourished for centuries as seafaring cultures that supported complex societies and strong traditions maintained through oral histories. The contact and eventual Western colonization that occurred during the past 500 years resulted in drastic and often catastrophic changes to these ancient societies.

While these places are home to many ancient cultures, we can also view these Pacific Island nations as among the newest nations in the world due to recent shifts in leadership and control. Most of these nations experienced significant change in political leadership in the post-colonial era following the end of World War II when Great Britain, Japan, France, and the United States relinquished territorial and governmental control. The political, economic, and social structures that were at that time under the control of the colonial powers were transferred to the indigenous people

with little preparation. The indigenous people that occupied the many islands were often unprepared for the new freedom and civil responsibilities that followed the colonial nations' sudden departure. And while the region remained a critical area strategic and military area for world powers, little was done to build the infrastructure needed for successful governance and administration.

The result of this situation has been a widespread conflict between old and new, between past and present, and between cultural collapse and survival. It is a tribute to the resiliency of the Pacific Islands' people that they have continued to survive amidst the many demands and pressures placed upon them by our changing world. Faced with great distances across islands and nations, inadequate financial and natural resources, and the marginalization of their traditional cultures and languages, the continued survival and growth of the Pacific Island people constitutes an extraordinary effort that can only be admired and respected by all people throughout the world.

Today, there remains a broad variety of governmental, political, and economic patterns among the Pacific Islands nations. Some are totally independent, others are commonwealth affiliates, others are independent republics but with compacts of free association, and still others are colonies (e.g., Tahiti). These varied patterns reflect the different histories and contemporary situations facing the Pacific Island nations. Many of the Pacific Island nations are designated as the United States Pacific Jurisdictions, a name that has little legal meaning but which reflects varying attachments and associations to the United States.

The Pacific Island region is generally divided into three oceanic areas: Polynesia, Micronesia, and Melanesia. *Polynesia* includes Hawaii, Western Samoa, American Samoa, Fiji, Cook Islands, Tuvalu, Tonga, New Zealand, Niue, and French Polynesia. *Micronesia* includes the Commonwealth of the Northern Marianas (USA), Guam (USA), the Republic of Palau, the Republic of Nauru, the Republic of the Marshall Islands, the Republic of Kiribati, and the Federated States of Micronesia (e.g., Yap, Chuuk, Pohnpei). *Melanesia* includes Papua-New Guinea, Solomon Islands, New Caledonia, and Vanuatu. *Austranesia* includes Australia and portions of New Guinea. The front piece provides a map of the Pacific Island region with the various divisions.

What is especially noteworthy about the Pacific Island region is that the populations of the different nations are very small in comparison to the area they occupy, which is larger than any continent in the world. The Pacific Island nations that will be included in the present conference and team building meeting study have the following populations (see Table 1). It should also be noted that many of the Pacific Island nations and rim locations are homes to diverse ethnocultural populations. For example, Guam's

Table 1.1. Land Mass and Population Estimates for Groups in Current Study

	Population	Land Mass (sq. miles)
American Samoa	58,070	77.0
Australian Aboriginals (Northern Territory)	125,000	?
Commonwealth of Northern Mariana Islands	78,252 (2004)	176.5
Federated States of Micronesia		
Chuuk	53,319	49.2
Pohnpei	33,692	133.4
Fiji	762,000	7050.0
Guam	155,225	212.0
Hawaii	1,260,000 (2004)	6459.0
Papua New Guinea	3,529,538	178, 704.0
Republic of Marshall Islands	59,246	70.0
Solomon Islands	523,000 (2004)	10, 639.0

(Sources: Pacific Island Health Officers Association Report—1997; Encarta Encylopedia—1998; US Census—2000; World Fact Book, 2004).

population includes Chamorros (indigenous people), Filipinos, Koreans, Chinese, Micronesians, Samoans, and various European-American groups. Throughout the Pacific Islands, there has been growing conflict among indigenous populations and other ethnocultural groups as political and economic power become targets of control. Good examples of these conflicts include the Solomon Islands, Fiji, Hawaii, and Australia to mention only a few.

RATIONALE FOR THE BOOK

The Pacific Island oceanic and rim nations include many traditional societies and emerging nations that have experienced abusive histories of colonization, exploitation, and social change and upheaval. Many societies and nations in the region are now struggling to restore traditional cultural heritages and identities, even as they seek to participate in a world community now dominated by Western values and lifestyles. The present social, cultural, and political context in many of these nations is characterized by growing cries for sovereignty, self-determination, independence, home rule, restorative justice, and cultural renaissance. Yet, in these times of transition, the daily-life of many of the people is filled with conflict, uncertainty, instability, and insecurity. National and cultural visions are being challenged by formidable social and environmental problems including substance abuse, poverty, crime and violence, helplessness, suicide,

alienation, malnutrition, inadequate economic, educational, medical, and social resources, and political corruption.

For many nations, cultural disintegration, cultural dislocation, cultural collapse, cultural abuse, and cultural insecurity now characterize the social milieu of daily life. Research indicates that when these cultural conditions are present, they exact a heavy and pernicious toll upon the individual and collective psyche. Certain patterns of social dysfunction, disorder, and deviancy are particularly associated with these conditions of cultural disintegration including:

A. Substance abuse
B. Problem drinking
C. Hopelessness and helplessness
D. Violence, crime, anger, and abuse
E. Juvenile delinquency
F. Suicide, alienation, anomie
G. Future shock, culture shock
H. AIDS

In dealing with rapid sociocultural change and with the attendant problems noted previously, Island people—political leaders, professionals, and lay people—will require fundamental information about the sources, types, and patterns of individual and societal problems. Among the most pressing questions that must be answered for health policy development and implementation are the following:

1. What are the variations in the rates, patterns, and ecologies of substance abuse and related disorders within and across the various research sites?
2. What are the variations in the cultural construction and meanings of substance abuse and related disorders within and across the various research sites?
3. What are the methodological challenges associated with the assessment of substance abuse and related disorders within and across the various research sites?
4. How can these data be used to by local health and social resources to develop policy, service delivery, and prevention programs?
5. What can the results of studies reveal about the relationship of sociocultural factors to the etiology, rates, patterns, course, and outcome of substance abuse and related disorders?
6. What is the relationship between substance use and abuse and related disorders such violence, suicide, and hopelessness/helplessness?

The material in the present volume represent a step toward answering some of these questions though it is clear that future efforts will be needed for substantive answers to be available.

CULTURAL DISINTEGRATION AND DISLOCATION INDICES

Under the pressures of rapid social and technical changes, cultures can collapse or disintegrate. There certain conditions that promote cultural disintegration and certain consequences that appear to be the result of this pernicious situation. While these conditions do not guarantee cultural disintegration will occur, they do increase the risk. Examples of these conditions are:

A. Recent history of disasters (natural or human)
B. Poor communication network
C. Urbanization
D. In-migration and out-migration
E. Few rituals and celebrations of tradition
F. Low social coherence
G. Rapid social and technical changes
H. Poverty and economic instability
I. Few, ineffective, and corrupt leaders

If cultures have strong historical roots and if they are coherent and well defined, then even in the face of major life stressors, they can still continue to provide an anchor for members.

It is clear that many Pacific Island and Oceanic nations and societies have bent beneath the pressures of social change and now find themselves in adaptive efforts that are challenging their limited resources. The outcome for many of these nations has been severe problems in health and well-being. In turn, these problems have added to the burdens the nations face by eroding human resources needed for successful coping and adjustment. The result today is that there is profound need for capacity building related to training, research, policy, and service development. In addition, there is a need to foster networking both within and across the nations and to relate to these networks to international resources (e.g., United Nations, World Bank). Further, there is an obligation to develop culturally relevant and sensitive collaborative training and research skills among researchers and service providers in the Pacific Region. Moreover, these efforts must be accompanied by a dedication to recognize, acknowledge, and understand the socio-cultural context of health and well-being, especially as it is linked

to problematic disorders such substance abuse, alcoholism, violence, and suicide. Obviously, no single discipline or profession will prove sufficient for this task. Rather, it will be necessary to encourage a multidisciplinary, multisectoral, and multicultural orientation and foundation for social action. Finally, it is essential that local and indigenous personnel be used as the primary resources whenever possible.

ORGANIZATION AND CONTENTS OF THE BOOK

The present volume is divided into three major sections. Section I provides some basic foundations for understanding the contemporary Pacific Island and Ocean nation situation, especially with regard to the rapid changes that are occurring and the possible implications these may have for health and well-being. Chapter 2 by Eugene Ogan, a cultural anthropologist with years of experience in the Pacific islands, provides an overview of the Pacific Islands with a special focus on the extensive variations in cultural change and developmental status among the different regions. In Chapter 3, Michael Salzman, discusses the implications of rapid social change for the health and well-being of Pacific Islanders. Dr. Salzman, a cross-cultural counseling specialist with experience in both Alaska Native and American Indian groups, invokes terror management theory in his explanations of the consequences of social change.

Section II includes a spectrum of discussions on various Pacific Island nations and cultural groups. Each of the chapters in this section were encouraged to follow a common outline in their presentation. The recommended outline included the following topics:

Introduction

- Location/Geography
- Population Distribution
- Economy/Politcal System
- Historical Chronology (Appendix—25 Major Events)

Culture

- Traditional Culture
- Forces of Change and Impact

Health and Well-being

- Health Care and Community System: Structure and Policies
- Substance Abuse
- Alcoholism
- Violence
- Suicide

Because of the obvious variations in data and background, some of the chapters in Section II varied in their ability to follow the outline. Nevertheless, the effort to use a common flow for the chapters provides a useful heuristic for understanding each chapter.

Chapter 4 was prepared by Bridie O' Reilley, Stuart Carr, and Floyd Bolitho, all psychologists from the Northern Territories in Australia who have worked in the Northern Territories with indigenous aboriginal populations. The abuse of the aboriginals in Australia is well known, and in the Northern Territories, many traditional ways of life are still being lived. Robin Taylor, a British trained psychologist who has lived in Fiji for many years and is a member of the faculty at the University of the South Pacific, authored Chapter 5 on Fiji. Among the Pacific Islands, Fiji has been the scene of considerable contemporary violence between Asian Indian migrants and the indigenous Fijian populations. This has created enormous tensions with profound implications for health and well-being. Chapter 6 addresses the many challenges of social change faced by that broad scattering of diverse island cultures known as the Federated States of Micronesia with a focus on Chuuk and Pohnpei. This chapter was written by Joakim Peter and Marcus Samo, two Pacific Island culture specialists associated with the FSM community college system. Fran Hezel, SJ, and Brett Robillard served as consultants.

Chapter 7 discusses Guam; the chapter was written by Juan Rapadas, a Chamorro clinical psychologist, Mamie Balajadia, a retired administrator from the Guamanian Mental Health Division, and Donald Rubinstein, an anthropologist who is a faculty member at the University of Guam. These authors provide a valuable overview of the problems facing Guam amidst the many changes occurring in this nation that has close political and economic ties to the United States. The challenges facing the Native Hawaiian people are discussed in Chapter 8, which was written by Ayda Aukahi Austin, a Native Hawaiian clinical psychologist, and Anthony J. Marsella, Professor of Psychology at the University of Hawaii. Hawaii, of course, is unique among the Pacific island communities because of its political status as a State. At the same time, the Native Hawaiian population has faced numerous problems in its efforts to preserve Native Hawaiian culture and identity. Chapter 9 is on the Marshall Islands, a Pacific Island nation that has known considerable trauma because of nuclear testing and rapid social changes. This chapter was written by Michael Jenkins, a Marshallese psychologist, and Cleveland McSwain, an American mental health professional who has lived in the Marshalls for a number of years. The last chapter in Section II was written by Rolf Kuschel, a Danish psychologist with considerable field experience in the Solomon Islands and two Solomon Islanders, 'Angikinui Francis T. Takiika and Kiu' Angiki. The Solomon Islands is perhaps the least developed of the Pacific Island nations addressed

in this volume and the changes occurring have led to much violence and strife among different tribal factions. These writers offers a useful summary and insightful analysis of the current situation in the Solomon Islands.

Section III includes two chapters that summarize data across the Pacific Island Nations represented. Chapter 11 is written by two public health specialists from Johns Hopkins University and Michigan State, Amelia Arria and James Anthony, who have spent considerable time in capacity building across numerous Pacific Islands. Their Chapter reviews many of the challenges facing Pacific Island nations as they seek to develop institutional structures to support development.

The closing chapter of this book is written by the volume's editors. In this chapter, the editors offer a list of conclusions and recommendations based upon the different chapters in this volume. The numerous and complex changes facing the Pacific Islands today is mirrored in the many variations in responses to these changes. This vast expanse of ocean cultures and nations has little population, but it has considerable importance for the world and for the many groups residing in its region. It is clear that the many changes occurring in the region will continue. In this volume, the consequences of these changes for human health and well-being are addressed.

REFERENCES

Leighton, A. (1959). My name is legion. New York: Basic Books.

Marsella, A.J. & Yamada, A. (2000). Culture and mental health: An overview. In I. Cuellar & F. Paniagua (Eds.). *Handbook of multicultural mental health*: *Assessment and treatment of diverse populations* (pp. 3–26). New York: Academic Press.

Chapter 2

Social Change in the Pacific

Problems Old, Problems New, Problems Borrowed

Eugene Ogan

INTRODUCTION

Decades of research in and about the Pacific Islands do not necessarily make it possible to provide complete coverage of all the issues relevant to a volume of this kind. The vast expanse of the Pacific Ocean, the largest single feature on the earth's surface, is daunting enough. Island variety adds to the complexity, since while New Guinea covers approximately 309,000 square miles, the average island is less than 25 square miles, and an island like Funafuti, the capital and population center of Tuvalu, has a land area of less than a single square mile (Rapaport 1999).

In terms of culture history, we know of at least two distinct migrations into the Pacific Islands, separated by thousands of years. The first brought settlers to New Guinea and islands as far to the east as Bougainville. In the 50,000 years that have elapsed since then, their descendants developed a diversity of languages unparalleled elsewhere in the world, perhaps 800 just in what is now independent Papua New Guinea. More than 40,000 years later, or about 3500 years ago, canoe voyagers carried new cultural traits into the northwestern and eastern parts of the Pacific, settling what later Europeans called Micronesia and Polynesia. Neither the earliest nor later settlers possessed metal technology, and all to some degree depended on gardening, fishing, and hunting for their livelihood. But within those constraints, they created a number of distinctive cultural patterns (Kirch 2000).

Finally, the topic of social change exacerbates the challenge to create a framework for the specific chapters to follow. Even if only those changes recorded in written history are considered, one must deal with a time span of three centuries. Whole volumes have been devoted to this subject (e.g., Robillard 1992). Though all the islands have been affected by one or another form of colonialism, here again the range of these experiences is extraordinary. Colonialism encompasses the relegation by outsiders of New Zealand Maori, Hawaiian Kanaka Maoli, and New Caledonia Kanak to minority status in their own homelands. Colonialism has meant military control of Micronesian islands; plantation economies followed by natural resource exploitation in Papua New Guinea and Solomon Islands; welfare colonialism in French Polynesia; and less neatly classifiable developments in Vanuatu, Samoa and Tonga.

Thus one cannot overemphasize—even to a relatively sophisticated readership—the variability found in the region. To do otherwise is to create a mythical "South Pacific" that does no justice either to problems to be explored or solutions to be found (Fry 1997). I shall return repeatedly to the issue of variation in islanders' lives throughout the remainder of this chapter.

The title of this overview is, perhaps inevitably, misleading in that human life cannot be divided neatly into categories, either of time or of space. "Old" problems may persist, sometimes in slightly changed form. "New" problems are likely to have their roots in the past. And, in view of the long history of outsiders moving into, and often dominating, islanders' lives, it might be said that all of the problems discussed in this volume are in a sense "borrowed," though perhaps "imported" or "imposed" would be better word choices. Like all anthropologists, I cannot resist reminding practitioners of other disciplines that our histories and social institutions are so functionally interrelated that we are always in danger of overlooking, or at any rate underemphasizing, these many connections. What appears to be an improvement in one area of social life may produce conflict or loss in other areas, and this is often the case with social problems as they develop. With all these cautions in mind, I will try to set a stage on which to mount the chapters that follow.

"OLD" PROBLEMS

Sixteen years ago, a conference on "Contemporary Issues in Mental Health Research in the Pacific Islands" was held in Honolulu. Looking back on the publication that resulted from the conference (Robillard and Marsella 1987), I am struck by the similarity of the topics presented then

to those in the present volume: alcohol and other substance abuse, suicide, youth crime, and adaptation of Islander cultures to create more successful ways to deal with such issues. Naturally one hopes to see continuity and progress in mental health research and intervention strategies, but should it be assumed that 1985's "old" problems have refused to go away—a discouraging thought, indeed—or that they have taken on new dimensions?

What does appear to me as a very serious "old" problem is rhetorical: the persistent use of the word "paradise" as a way to think about the Pacific Islands. I am not alone in arguing that this term has for centuries misled outsiders to ignore the underlying humanity that Islanders share with those who live beyond that vast ocean. The notion that Islanders live in "paradise" is analogous to what Edward Said has called "Orientalism," a perspective that collapses the rich variety of human experiences into some essentialized and ultimately fictional portrait (Fry, 1997, p. 310). Pacific Islands were never "paradise," and the inhabitants were no more the noble savages the French explorer Bougainville thought he saw than they were the savage brutes described by some early missionaries.

This idea is particularly pernicious when considering social change. If one actually believes in this mythical Eden, then any change can only be understood in negative terms. A notably egregious example of this misunderstanding can be found in the popular book The Happy Isles of Oceania (Theroux 1992). Such thinking may be excusable in a "creative writer," but it is much more dangerous if it is allowed to guide policy created and imposed by outsiders (Fry, 1997, pp. 309–13). Given the variety of environments and cultures already noted for the Pacific, it must be understood that islanders face some problems that are unique to individual populations but that others can be best addressed cooperatively.

It is also the case that the colonial legacy of the past two centuries can be thought of as an "old" problem that continues to shape islanders' destinies in ways that require detailed exploration (Wesley-Smith , 1999). For example, the manner in which colonial boundaries were drawn has profoundly affected the "new" problems of ethnic conflict in Papua New Guinea and Solomon Islands. Here a dilemma for analysis is that, in spelling out what might be called colonial deformations, care must be taken not to deny the power and agency of islanders themselves. Even the best-intentioned outsiders, who rightly condemn Western, especially Anglo-American, imperialism for creating many of the social problems discussed here may fall into the trap of building new kinds of "victim" attitudes that stifle, rather than enhance, the ability of islanders to take control of their own destinies. Anthropologists are notorious for blaming missionaries and colonial administrators for producing "socio-cultural disintegration," yet international aid agencies may be operating with the same kind of "we know what's better

for you" or "what has worked for us must be the road for you to follow" program. This is why the goals of building islanders' capacities, participation and empowerment, based on cultural relevance and sensitivity, are spelled out in the chapters that follow.

"NEW, BORROWED, OR IMPOSED" PROBLEMS

It is less useful to belabor these kinds of "old" problems than to focus on what seem to be at least some of the factors of social change that are of most widespread relevance to islanders' lives today and in the foreseeable future. These changes are both "new" in that they were not addressed in the 1985 conference and certainly "borrowed" in the sense that they can be dealt with only through collaboration between metropolitan and island nations. The first of these has received widespread currency under the label "globalization," a term that often seems to carry too many different meanings to too many different people. Fortunately, Stewart Firth has recently brought some clarity, together with a particular focus on the Pacific, to the concept. He is careful to point out the record of an earlier history, dating from the 1850s, when traders, planters, miners and settlers first brought the forces of capitalism to the islands (Firth, 2000, 181–184). However, it is a new form of globalization process that he characterizes in specific terms.

The first characteristic is an increased emphasis on free trade. Policy makers are urged to remove perceived barriers like tariffs, quotas and subsidies that would impede any easy flow of goods and services throughout the world. From his observation post in Fiji, Firth sees special dangers when this emphasis replaces the kind of special preferences islands have enjoyed under the Lome Convention. This Convention, which provides advantages for agricultural exports to the European Union, has been a mainstay of the Fijian sugar industry, but it also benefited Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. It expired in 2000 and, since this kind of special arrangement is now seen as "antiquated," is unlikely to be renewed in its present form (Firth, 2000, 186–7).

Firth further characterizes globalization in terms of a technological revolution in electronic communication. Though noting the possible benefits to island nations that have been disadvantaged by the difficulties of communication and travel over vast expanses of ocean, Firth uses Fiji as a particular case to express his pessimism. An alternative view is offered below.

Finally, Firth discusses the new freedom to move capital around the world. Since the 1970s, financial institutions in the industrialized world have pushed for deregulation of capital movements, resulting in

"a dynamic, yet inherently unstable and volatile global economy" (Firth 2000, 188). Such instability was most dramatically demonstrated in the series of collapses that blighted East Asian economies beginning in 1997. Though the same kind of speculation is not a particular threat to Pacific Island currencies, Pacific nations might be forced to devalue their currencies in order to protect the value of their exports, but devaluation means that the prices they pay for imports would increase. Furthermore, the globalization agenda seems to press for a regional currency like that of the Eurodollar, which would turn over control of much economic life to metropolitan financial institutions.

Pacific Island nations are already disadvantaged economically vis-à-vis metropolitan countries. Since economic factors underlie so many social institutions, it is all too easy to envision an entire new set of social problems emerging from the conditions created by the globalization process spelled out by Firth.

Aid donors, international banks and financial institutions, and foreign investors have already begun to pressure the leaders of these nations to formulate policies to speed up this new agenda. This is particularly notable in the case of land tenure. Economic development, according to such agencies as the International Monetary Fund, is said to require granting fee simple title to individuals, in contrast to other arrangements more typical of Pacific societies.

To the extent that there is any uniformity in Pacific Island cultures, it lies in the centrality of land as material resource and powerful symbol. The flexibility of different forms of land tenure as observed, though not always understood, at first contact was precisely what made possible adaptation to otherwise inhospitable environments. By careful attention to local conditions, whether on large islands or tiny atolls, Pacific societies were able to provide reasonable access to the resources required for daily life and, in the more favorable environments, to achieve surpluses adequate to support specialists in arts, crafts and ritual. Therefore any change in long-established rules of tenure and usage would be bound to have widespread social consequences.

It is true that a trend for communalistic forms of land tenure to be replaced by forms emphasizing individual ownership appears to be worldwide (Ward and Kingdon, 1995, 6). However, this does not mean that shifts away from older patterns, governed importantly by norms of kinship-based reciprocity, should be lightly undertaken, especially when imposed from the top down. The mere suggestion of departing from traditional rules of land tenure set off riots in Papua New Guinea in 1999 and in 2000, suggesting that many in the population were all too aware of what might happen to their lives if such a move took place. (That country's prime

minister, an economist by training, seems sympathetic to this and other features of a globalization agenda, though PNG's complex parliamentary politics make it risky to condemn his policies prematurely.) Fiji's current political turmoil, though often portrayed in purely ethnic images, has at base issues of land, especially the question of leases for sugar cane growers. This is also true to a degree in Solomon Islands, where settlement by Malaitan islanders on the island of Guadalcanal was the proximate cause of allegedly ethnic strife.

Cluny Macpherson (1999) has provided an example from independent Samoa of far-reaching social and cultural effects as land increasingly came to be regarded as individual property. His analysis has implications for the whole region, and links many of the topics considered here and in the following chapters. At the time of European contact, kinship was the principle around which economic, political and religious life was organized. Kinship was the basis for access to land and other resources and for the social relations of a production system of subsistence agriculture (Macpherson, 1999, 73). This production system was directed by title-holders (*matai*) who controlled specific areas of land. Beginning with Christian missionization, this entire structure came under attack in ways not always apparent to either Samoans or outsiders. Missions expected support from converts, encouraging Samoans to produce surpluses for commodity exchange. Expatriates sought to establish plantations, and the alienation of even small parcels of land opened the possibility of a new category of rights and relationships based on ideas of individual private property, rather than on kinship (Macpherson, 1999, 80). Other changes, which cannot be detailed here, include the creation of a labor market and the new political structures (especially a Land Title Court) that came with independence in 1962.

Samoans, like other Pacific Islanders in the late 20th and early 21st centuries, have migrated beyond their islands to metropolitan countries like New Zealand, Australia and the United States. The migrants have become well known among social scientists for the substantial sums of money they remit to their relatives at home. Unlike the goods and services Samoans traditionally rendered to title-holders, these remittances normally go to individual family members, further weakening a nexus that once linked land, *matai*, and larger kinship groups. What is particularly interesting in Macpherson's analysis is that, despite the many changes affecting Samoan land tenure, he has found that Samoans still subscribe to an ideology of kinship that reflects earlier, rather than contemporary, conditions. This accords with Ward and Kingdon's observation (1995, 37) that in the Pacific, much current discussion of land tenure is more concerned with rhetorical assertions about the importance of idealized forms of tenure than with actual practices. Thus interrelated questions of an emergent global economy

and the social-cultural centrality of land in islanders' lives form a prime example of the broader stage on which such specific social problems as migration or substance abuse can be expected to unfold.

Global Warming

The term "global" inevitably directs attention to another relatively new development with the potential to have a profound effect on islanders' lives: climate changes created by carbon dioxide emissions leading to the "greenhouse effect." Combustion of carbon-based fuels together with the continued destruction of tropical rain forests will enhance the greenhouse effect, producing climatic changes around the world (Sturman and McGowan, 1999, p. 16). In Connell's (1999, p. 5) trenchant statement "the greenhouse effect is effectively an uncontrolled experiment on a global scale." This means that the specifics cannot be known at this point in time, but there is general agreement that one consequence will be a rise in sea levels. The environments of all island states are bound to be affected, since so much of their economic infrastructure is along the coastlines. However, it is the smaller Pacific Islands that face the greatest dangers.

Four of the five world states that are composed solely of coral atolls lie in the Pacific: Tuvalu, Tokelau, Kiribati, and the Marshall Islands. For them, rising sea levels have already meant some erosion in environments characterized by limited land and economies traditionally based in part on subsistence gardening. Erosion may be exacerbated if, as many scientists predict, the frequency and severity of cyclones and tropical storms increase with rising temperatures. These factors in turn will decrease groundwater availability and potability (Connell, 1999, pp. 3–4). In the Carteret Islands, atolls that form a tiny part of the nation of Papua New Guinea, these effects have already necessitated removing part of the population to the larger neighboring island of Bougainville (Connell, 1999, p. 18).

Logging operations in Papua New Guinea and Solomon Islands may be said to have contributed to the greenhouse effect by reducing tropical forests, but the nations most responsible are industrialized countries outside the region. The sometime prime minister of Tuvalu, Bikienibeu Paeniu, has consistently spoken out on this issue, saying in 1997 "We strongly believe that we have done the least to cause this hazardous problem, although we are now faced with the highest possibility of losing the most" (quoted in Connell, 1999, p. 5). His sentiments were echoed in a paper presented by the President of the Federated States of Micronesia (FSM), Leo Falcam, at an East-West Center Senior Policy Seminar in Honolulu, August 2001.

Australia and the United States have stubbornly refused to ratify the Kyoto agreement that might reduce this danger. Although President Bush

has recently issued statements suggesting greater attention to the issue, his overall energy policy does not provide much ground for optimism. Yet two of the island nations, FSM and the Republic of the Marshall Islands (RMI), for which the United States once bore responsibility under a United Nations Trust, are clearly at risk. What new kinds of social problems may appear if the future produces a substantial number of "environmental refugees" fleeing their atoll homelands, since complete inundation is hardly beyond the realm of possibility (Connell, 1999, p. 18)? How will this affect migration patterns, with all their social consequences, that could extend even beyond the smallest islands?

AIDS in the Pacific

A problem that has yet to receive adequate attention but with equally devastating potential for islanders' lives—and one that has certainly been "imported"—is the disease AIDS. In 1999 this scourge became the fourth greatest cause of death in the world. It is difficult to assess the dimensions of the disease in the Pacific Islands but some puzzling questions can be raised based on a recent article by Crockett (2000) about Papua New Guinea. The first PNG case of HIV (the virus that causes AIDS) was reported in 1987, and during the next decade the number of reported cases grew exponentially. Disease experts in a recent workshop estimated a range of 6000 to 22,000 cases currently in PNG. In a worst case scenario, by 2010 there could be up to 25 percent of cases infected before birth, villages in which 40 percent of young people were infected, and a drop in life expectancy of up to 25 percent (Crockett, 2000, p. 14).

PNG is by far the largest nation in the Pacific, so it is difficult to make comparisons with other countries, especially from the graph shown in Crockett's article. This is particularly problematic when contrasting rates between PNG and neighboring Solomon Islands, one of the larger Pacific nations, but one where the disease appears to have had little impact. Other media sources suggest that assessing the "new" threat of AIDS is compounded by the "old" question of differential mission impact. For example, the late prime minister of independent Samoa, a pastor, was notorious for refusing to allow discussion of this and other sexual topics to enter any public forum. Here there is a clear need for further research.

Scare Stories and Doomsday Scenarios

Another "new" development in the Pacific Islands that has occurred since the 1985 conference is a level of political unrest unprecedented since the region began to emerge from colonialism. However, in contrast to the

undeniable menace to island nations of global warming, this instability has lent itself to considerable media exaggeration and misunderstanding. Once again, part of the misunderstanding stems from the portrayal of the Pacific Islands as a "paradise." Against an imaginary Edenic background, real life politics can easily be interpreted in the most frightening manner.

A notable example of such scare stories appeared in May 2001 (Reilly 2001). Under the headline "Islands of Neglect; Trouble in Paradise [sic]", the writer begins "Weak governance, widespread corruption, economic mismanagement, rising crime and violent ethnic conflicts are undermining the stability of the island nations of the South Pacific." He goes on to warn of "organized Russian and Chinese crime gangs, including drug and arms dealers," with an implication that the region faces a new "Yellow Peril" from Asian countries. Getting beyond inflammatory narratives of this kind requires abandoning the image of an essentialized "South Pacific," undifferentiated as to cultural and historical specificities, to assess just where some undeniable political problems exist.

There is no question that people living in Fiji, Papua New Guinea, and Solomon Islands have suffered from events of the past fourteen years. In 1987, Fiji experienced the region's first military coup, an event that shocked outsiders who still hung on to "paradisiacal" dreams. It was led by an ethnic Fijian army officer bent on establishing forever the dominance of his people over the country's sizable population of Indians who were descended from laborers imported to work in the sugar industry. Since troops first marched a newly elected government out of parliament, the country went through a second coup led by the same officer, the promulgation of two different constitutions, and in May 2000 a third coup led by someone described in the media as a "part-Fijian failed businessman." An interim military government has ruled until the present (August 2001) with a general election imminent.

Two years after the first Fiji coup, long-simmering opposition to a huge copper mine in Bougainville, the North Solomons Province of Papua New Guinea, erupted in violence and closure of the mine. Aggravated by the central government's police and military repression, the initial local unrest spread and escalated into a demand for unilateral secession from PNG. The conflict lasted until a cease-fire and peacekeeping arrangements were negotiated almost a decade later. Final resolution awaits parliamentary action to grant the province greater autonomy. Beginning in 1998, continuing disturbances on the Solomon Island of Guadalcanal, where residents had come to resent a growing number of settlers from Malaita Island, reached crisis proportions. In 2000, the prime minister was turned out of office by force. It is not clear when a promised general election will take place.

Obviously, such turmoil creates its own set of social problems. At a minimum, social services like health and education are disrupted. This is particularly stressful in PNG and Solomon Islands where these services have undergone steady decline since independence arrived in the 1970s. Young men, a group generally un- or underemployed in these countries, have not passed up the opportunity to behave lawlessly in the guise of "freedom fighters." It is also this group that is most likely to become involved in substance abuse and dangerous sexual behavior.

Yet what some (Fry 1997, Wesley-Smith 1999) have come to call "doomsday scenarios" need further critical examination. Again readers are presented with a "South Pacific" where paradise may be lost unless the inhabitants are rescued by benevolent outsiders. It is hardly a coincidence that, implied in this rescue effort, is the globalization agenda described earlier. Once more islanders are being told that they are limited in their ability to handle their own affairs (Hau'ofa, 1994, p. 149). If only they would accept the leadership of the so-called modern world, with all its trappings of capitalism and individualized striving for advantage, they might yet be saved.

Informed criticism might begin by taking a broader comparative perspective. Once notions of "paradise" are set aside, does the turmoil in Solomon Islands (arguably the most distressed of the countries discussed above) seem as awful as that in Africa, the Near East, or the Balkans? Are all regions of the United States free of "weak governance, widespread corruption, economic mismanagement, rising crime and violent ethnic conflict"? Greg Fry lays the creation of doomsday scenarios at the feet of certain sections of Australian society: the media, the policy-oriented social sciences, and policy makers (1997, p. 311). However, the same kind of narrative appears wherever a monolithic "South Pacific" is discussed. This essentialization permits generalizations to be made by taking a worst case in one area and using that to create a portrait of the entire region (Fry, 1997, pp. 324–325).

There are other methodological criticisms that can be raised against doomsday scenarios. What is being measured, and do such measurements have meaning for islanders' lives as actually lived? Fry has pointed out that the picture of life in Pacific Island nations drawn by the World Bank reports of 1991 and 1993 is significantly different from that shown in the United Nations Development Program's Pacific Human Development Report of 1994 (Fry, 1997, p. 334). The latter points up successes like increased life expectancies in several island nations. Community health is at least as significant an index of development as Gross National Product. In this connection, Fry notes that the globalization agenda itself may have incompatible objectives. The Samoan example above shows the close connection

between traditional communalistic forms of land tenure and widespread kinship networks capable of providing practical, material support throughout the community. If land titles are instead granted to individuals, what will become of the previously adequate means for meeting the needs of the aged and other dependents (Fry, 1997, 335)? Thus what is offered by outsiders as a recipe for development is just as likely to create new problems.

Collecting data in Pacific Island communities that lack trained personnel and modern technical facilities is a persistent obstacle to being confident that doomsday scenarios are realistic. For example, I have yet to find what I consider adequate evidence for the figure of 20,000 deaths so often quoted as having occurred during the Bougainville conflict. If the United States has experienced problems with administering its most recent census, how can we be sure of an accurate casualty count under combat conditions on a Pacific island? In fact, when I returned in July 2000 to the area of most intense fighting, my friends noted with some ribald commentary the large number of children born while they were living in the bush away from their village homes and gardens. They also provided me with much lower figures for deaths directly attributable to armed combat. Their eyewitness testimony further casts doubt about mysterious arms dealers said to be moving their shipments back and forth between Bougainville and the Solomon Islands. (An Associated Press story of July 12, 2001, reports a United Nations study attesting to the difficulty of accurately tracing the international traffic in arms.) This in turn raises questions about the "organized Russian and Chinese gangs, including drug and arms dealers" described in the news story above who are alleged to be despoiling "paradise."

REAL POLITICS, REAL PROBLEMS

Terence Wesley-Smith (1999) provides a much more measured assessment of political developments; he criticizes doomsday scenarios without minimizing the real difficulties faced by Pacific Island nations. According to the definitions of the political scientist J. S. Migdal, all postcolonial nations in the region are "weak states" in that their leaders are incapable of engineering basic social and economic improvements within their respective societies (1999, p. 153). Though there is some variation from country to country as to the causes of this situation, Wesley-Smith makes a convincing argument that social change that created political turmoil at the turn of the 21st century "clearly has its origins in the disruptions and innovations of the colonial period" (1999, p. 145).

Some island areas had the misfortune to be subjected to more than one colonial administration, especially in the aftermaths of World War I when

Germany lost its Pacific possessions, and World War II when the same thing happened to Japan. However, no matter which metropolitan nation controlled Pacific Island colonies, the interests of the colonizer, whether economic or strategic, remained critical in determining policy. The political systems established were not representative of the societies they governed (Larmour, 1994, p. 391). Colonial administration was more centralized than any traditional political form, and often did not have much impact on local populations in rural areas lying outside the colonial centers (Larmour, 1994, pp. 397–98). In some places the presence of Christian missions or a plantation economy rivaled administration when it came to affecting islanders' lives.

Decolonization of the Pacific began in the 1960s and once begun proceeded rapidly over the next two decades. Depending on the former colonial power, decolonization produced a variety of political structures. Following Wesley-Smith, it can be argued that all these structures represented imposition of a nation-state model despite the poor fit between that model and many island societies. Furthermore, especially in the Melanesian islands, the hurried rush to decolonization hardly began to lay the groundwork for the institutions that would have supported a modern nation-state.

Independent Pacific Island governments today can be very roughly divided between Westminister systems, in which the executive authority is elected by and from parliament, and "the others." The latter category includes a variety of forms, including elements from both "Westminister" and "Washington." Thus Palau's president is elected directly, while in the Marshall Islands he (to date heads of Pacific Island governments have all been male) is elected from and by the legislative body. Governments are generally "democratic" in that the legislative authority is elected by universal adult suffrage (Larmour, 1994, p. 389), but ethnic ballots complicate Fiji's electoral process while in Samoa, women and those who lacked *matai* titles only recently gained the right to vote.

The electoral process, especially in a parliamentary system, might seem to require the existence of organized political parties. In the smaller nations with correspondingly small legislatures, it is not surprising that politics is much more a matter of personalities than parties and platforms. In Tuvalu, for example, Bikenibeu Paeniu and Kamuta Laatasi alternated as prime minister through what seemed to outsiders to be a revolving door. In the larger nations like PNG and Solomon Islands, where parties have at least a nominal existence, "they tend to be created and abandoned with great rapidity," waxing and waning in strength (Larmour, 1994, p. 390). Governments in these countries can only be formed by a coalition of parties; as parliamentarians change party membership almost

at will, no-confidence votes have made it almost impossible for any government to complete a full term in office. This kind of instability at the top, together with bureaucracies that are "thin on the ground" (Larmour, 1994, p. 392), makes delivery of health and other social services ever more problematic.

A distinctive political problem now faces the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI). When the United States relinquished control of what had been the Trust Territory of the Pacific, Compacts of Free Association were negotiated between the US and the three nations: FSM, RMI, and Palau that emerged. The Compacts with FSM and RMI will expire this year, that for Palau not until 2009. Because the FSM and RMI Compacts were renegotiated by November 3, 2001, the US is committed to continue financial assistance to these countries for an additional two years.

Renegotiations might address a number of issues. One of these is the present arrangement whereby citizens of FSM and RMI are allowed to migrate freely to the US, resulting in sizable communities in certain American states (Hess, Nero & Burton, 2001). However, all reports indicate that the two Micronesian nations will only address the questions of financial assistance, matters of vital concern since both countries are so dependent upon U.S. support.

RMI's position has unique complications. The US has maintained a missile testing station on Kwajalein for decades. Beginning in 1964, a separate agreement has covered the station's use with revenue currently to be divided between landowners and the RMI government. So long as the US regards the station as important to its strategic interests, RMI has special leverage over any renegotiation. The Republic also has occupied, to its advantage, a superior moral position because of the nuclear tests carried out by the US in the 1940s and 1950s. Compensation for damages inflicted on islanders' health and environment has added up to millions and the end is not in sight. On the other hand, some observers have begun to question the morality of RMI leadership. For 14 years after independence, the presidency was held by one chiefly family; when the first president died in 1996, his cousin was elected to succeed him the following year. However, in 2000 a new president was elected running on an explicitly anti-corruption platform.

Hezel (2001) has provided a detailed consideration of how profoundly the Compact's negotiation could affect FSM. He notes that, as in the RMI case, questions have been raised about FSM's use of the millions of dollars provided by the US since the Compact was originally signed, but points out that only those Pacific Island nations blessed with abundant mineral resources have been able to approximate anything like economic

self-sufficiency since decolonization. What is clear is the gap presently existing between the US and FSM proposals for assistance in a renegotiated Compact. FSM has asked for an $84 million annual grant, together with $20 million a year to build up a trust fund over a 20-year period. The US counter offer is for $61 million yearly, and $13 million each year for the trust fund over a 15-year period; that is, just a little more than half of what FSM has requested (Hezel, 2001, p. 5).

Here is a real political problem to be considered, which at worst could produce a genuine doomsday scenario. Renegotiation of these Compacts resonates with issues like the globalization agenda raised earlier. As Wesley-Smith (1999, p. 144) has pointed out, "It is no coincidence that the concern with economic performance, governance, and self-sufficiency has increased at the same time that the Cold War strategic imperative has fallen away." For FSM and RMI, the loss of social services that US financial assistance has provided creates a much more frightening prospect than do rumored "Russian and Chinese gangs."

The foregoing discussion has suggested that grafting Western-style political systems onto Pacific Island societies has proved problematic at best. Wesley-Smith raises "the challenge . . . to imagine alternative, more flexible forms of political organization that are better able to deal global forces and more accommodating of local needs and demands." If, as he suggests, "indigenous political forms and values [are to] enjoy a new lease on life," then surely greater attention should be paid to Pacific voices articulating those forms and values (Wesley-Smith, 1999, p. 153).

LISTENING TO PACIFIC VOICES

One of the major changes in the Pacific Islands during the past three decades has been the continuing growth of a western-educated cohort of islanders. In the past, colonial administrations had been happy to leave much education to Christian missions, especially in the Melanesian islands. Mission schools seldom took students beyond a primary level, and often emphasized doctrine rather than secular subjects. Pressures for decolonization forced the metropolitan powers to recognize the need to expand education at all levels, including the tertiary. The Universities of Papua New Guinea and the South Pacific (based in Fiji but with extension campuses and courses extending through the southwestern part of the region) began to produce graduates in the 1970s. Tertiary institutions appeared in the former Trust Territory of the Pacific. Many products of

Pacific educational institutions went on to further training throughout the world.

It was inevitable that islanders first received their education according to models and standards established by the metropolitan nations, but it was also predictable that the time would arrive when some of this group would begin to question whether what they had learned provided the best path toward a new millennium in the Pacific. The entire range of those questions cannot be covered here, but a few notable island voices should be mentioned. As William Clarke points out, islanders themselves are most acute in rejecting the essentialized "South Pacific" that still clouds the perceptions of outsiders. Rather, they speak with a plurality of voices, even as they address topics of general concern (Clarke, 2001, p. 1).

Although there is no reason to believe that he would style himself as the singular spokesman for Pacific islanders, Epeli Hau'ofa has provided some of the most provocative recent commentary to criticize conventional outsider wisdom about the region. In a widely cited essay (Hau'ofa, 1994), he called into question the entire perspective of a Pacific in which bits of land were too small, scattered and isolated to develop a viable future. Such a perspective, he argued, "overlooks culture history and the contemporary process of what may be called world enlargement that is carried out by tens of thousands of ordinary Pacific Islanders" (1994, p. 151). He thus reminds the rest of the world of the traditions of movement and creative exchange that characterized the pre-colonial Pacific Islands and is re-emerging with the development of new communication and transportation technology. In this and other writing, Hau'ofa is at pains to claim "Our vast region has its own long histories, its storehouses of knowledge, skills, ideals for social relationships, and oceanic problems and potentials that are quite different from those of large landmasses in which hegemonic views and agendas are hatched" (Hau'ofa, 2000, 465).

Hau'ofa may be uniquely placed by wide experience to provide this kind of challenge. A Tongan by ancestry, he grew up in Papua as the child of missionaries, he received a Ph.D. in anthropology from an Australian University, he has written fiction, and for years he has taught at the University of the South Pacific, which draws its students widely from the English-speaking islands. However, he is not alone in developing a distinctive voice in which to question outsider agendas for Pacific futures. Clarke has recently demonstrated the ways islander poets can offer trenchant commentary on social change. Only one example can be quoted here, by the noted Samoan writer, Albert Wendt. The poem illustrates the manner in which ideologies like *fa'aSamoa* (the Samoan way) and other appeals to "tradition" may perpetuate inequality as well as "bestow

collective dignity, uniqueness, and worth on a community" (Clarke, 2000, 11–12).

> The faa-samoa is perfect, they sd
> from behind cocktail bars like pulpits
> double scotch on the rocks, I sd
> we have no orphans, no one starves
> we share everything, they sd
> refill my glass, I sd
> and we all have alofa [love]
> For one another, they sd
> drown me in your alofa then, I sd
> its true they sd, our samoa
> is a paradise, we venerate our royalty,
> our pastors and leaders and beloved dead
> god gave us the faa-samoa and
> only he can take it away, they sd
> amen, I sd
> their imported firstclass whisky
> was alive with corpses: my uncle
> and his army of hungry kids,
> malnutritioned children in dirty wards,
> an old woman begging in the bank,
> my generation migrating overseas
> for jobs, while politicians
> and merchants brag obesely
> in the RSA, and pastors bang
> out sermons about the obedient
> and righteous life—aiafu [sweat-eaters]
> all growing fat in
> a blind man's paradise

Whether in the form of poetry or social science commentary, islander voices carry the message of hope for greater autonomy and opportunity to determine their own future. That this is not an idle hope, even in the face of an imposed globalization agenda, is suggested by two examples. The first comes from Hau'ofa's homeland of Tonga where, contrary to Firth's pessimism noted above, cyberspace technology has been utilized to economic advantage.

A United Nations agency coordinates orbital positioning and radio frequencies used by space satellites so as to avoid physical or electromagnetic clashes. International law states that nearly any sovereign nation can establish control over orbital slots that determine who has the right to launch space satellites serving a particular region. In 1991 Tonga established claims

to six such slots, adding three more later, and forming the corporation Tongasat to manage the operation. This is like proposing a flag of convenience, a legal maneuver common in the international shipping business, whereby owners register ships under the flags of smaller nations in order to escape or minimize regulations imposed by larger countries (van Fossen, 1999, pp. 23–24). The financial benefits of Tongasat to the nation at large have been called into question (van Fossen, 1999, pp. 17–20). Furthermore, the world satellite industry may be subject to the same kind of boom and bust cycle seen in the oil tanker industry, a notable user of flags of convenience (van Fossen, 1999, p. 22). Nevertheless, the development of cyberspace technology suggests new possibilities for Pacific Island nations that go beyond the conventional wisdom that creates limits based on size and isolation.

Tiny Tuvalu seems to have pulled off its own coup in the emergent world of electronic technology. The nation registered its Internet suffix, .tv, and put it on the international market. After some false starts, the suffix was sold to a California company for a guaranteed annual payment of $4 million. Tuvalu had already shown careful financial management of a national investment fund, begun with aid contributions from metropolitan nations, that is now worth about $25 million. Among planned expenditures is provision for free education for all students studying in universities abroad.

These cases would appear to illustrate what Hau'ofa described as "world enlargement" wherein Pacific Islanders are beginning to discover ways to voyage into new realms, just as their ancestors participated in some of the great sagas of world prehistory (Kirch, 2000, 96).

CONCLUSION

Any discussion of social change, by its very nature, precludes neat conclusions. The present comments attempt to introduce to a readership, perhaps less familiar with the Pacific Islands than with other parts of the world, some idea of the factors that create social problems that currently exist or are on the horizon. This section was particularly designed to give the reader a context that will make the chapters that follow more useful, especially for comparison both within and beyond an island world. Perhaps the only final message herein is that which is appropriate for an anthropologist: we share a common humanity, combined with a rich and wonderful diversity in our respective social and cultural lives. Both problems and solutions must be understood and solved against that background.

NOTES

I hope I have made it clear by citing available literature that I make no claim for any extraordinary originality in constructing this overview. I am only one of a number of scholars associated with the University of Hawai'i and the Australian National University who have been threshing out these ideas for several years. In addition, I am grateful to Glenn Petersen for allowing me to read his manuscript "Routine Provocation and Denial: From the Tonkin Gulf and Hainan to Kyoto and the Pacific Islands" and, in our subsequent conversations, increasing my understanding of significant issues. I also learned much from the discussions at the conference "Paradise Lost, Paradise Regained" from which the present volume has emerged. As always, I have profited from the intellectual stimulation received from William C. Clarke, who has for many years shared his wisdom about the Pacific Islands with me. Naturally, any shortcomings that appear in this article are exclusively my responsibility.

REFERENCES

Clarke, W. C. (2000) Pacific Voices, Pacific Views: Poets as Commentators on the Contemporary Pacific. Canberra: Centre for the Contempoarary Pacific, Australian National University.

Connell, J. (1999) Environmental Change, Economic Development, and Emigration in Tuvalu. Pacific Studies, 22, 1–20.

Crockett, S. (2000) The Future State and Predictions of HIV/AIDS in Papua New Guinea. Pacific Aids Alert, 20, 12–15.

Firth, S. (2000) The Pacific Islands and the Globalization Agenda. The Contemporary Pacific, 12, 176–192.

Fry, G. (1997) Framing the Islands: Knowledge and Power in Changing Australian Images of "The South Pacific", The Contemporary Pacific, 9, 305–344.

Hau'ofa, E. (1994) Our Sea of Islands. The Contemporary Pacific, 6, 146–181.

Hau'ofa, E. (2000) Epilogue: Pasts to Remember. In R. Borofsky (Ed.) Remembrance of Pacific Pasts: Invitation to Remake History (pp. 453–471). Honolulu: University of Hawai'i Press.

Hess, J., Nero, K. J., and Burton, M. J. (2001) Creating Options: Forming a Marshallese Community in Orange County, California. The Contemporary Pacific. 13, 89–121.

Hezel, F. X., S. J. (2001) Feast and Famine: U.S. Assistance for the Next Two Years and the Compact Funding Outlook. Micronesian Counselor, 35, 1–11.

Kirch, P. V. (2000) On the Road of the Winds: An Archaeological History of the Pacific Islands Before European Contact. Berkeley, CA: University of California Press.

Larmour, P. (1994) Political Institutions. In R. K. Howe, R. C. Kiste & B. V. Lal (Eds.) Tides of History: Pacific Islands in the Twentieth Century. Honolulu: University of Hawai'i Press.

Macpherson, C. (1999) Changing Contours of Kinship: The Impact of Social and Development on Kinship Organization in the South Pacific. Pacific Studies, 22, 71–114.

Rapaport, M. (Ed.) (1999) The Pacific Islands: Environment and Society. Honolulu: The Bess Press.

Reilly, B. (2001) Islands of Neglect: Trouble in Paradise. Asian Wall Street Journal, May 7.

Robillard, A. (Ed.) (1992) Social Change in the Pacific Islands. London and New York: Kegan Paul International.
Robillard, A. & Marsella, A. (Eds.) (1987) Contemporary Issues in Mental Health Research in the Pacific Islands. Honolulu: Social Science Research Institute, University of Hawai'i.
Sturman, A. P. and McGowan, H. A. (1999) Climate. In M. Rapaport (Ed.) The Pacific Islands: Environment and Society (pp. 3–18). Honolulu: The Bess Press.
Theroux, P. (1992) The Happy Isles of Oceania: Paddling the Pacific. New York: Putnam.
Van Fossen, A. (1999) Globalization, Stateless Capitalism, and the International Political Economy of Tonga's Satellite Venture. Pacific Studies, 22, 1–26.
Ward, R. G. and Kingdon, E. (Eds.) (1995) Land, Custom and Practice in the South Pacific. Cambridge: Cambridge University Press.
Wesley-Smith, T. (1999) Changing Patterns of Power. In M. Rapaport (Ed.) The Pacific Islands: Environment and Society (pp. 144–155). Honolulu: The Bess Press.

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Chapter 3

The Dynamics of Cultural Trauma
Implications for the Pacific Nations

Michael Salzman

THE DYNAMICS OF CULTURAL TRAUMA: IMPLICATIONS FOR THE PACIFIC NATIONS

Cultural disintegration and dislocation have been associated with certain patterns of personal and social dysfunction such as substance abuse, hopelessness, and suicide. In order to comprehend and address these expressions of human suffering, it is necessary to consider essential psychological functions of culture, predictable consequences of traumatic cultural disruption, and implications for recovery.

Becker (1971) saw culture as the highest form of human adaptation. Triandis (1994) placed culture in a context anchored in the ecology from which it arose and adapted. Recent advances in experimental social psychology (Greenberg, Solomon & Pyszczynski, 1997; Solomon, Greenberg, & Pyszcynski, 1991), suggest that that cultures also respond to core existential human concerns that enable adherents to manage the anxiety inherent in human existence and to enhance the probability of adaptive action. Terror Management Theory (TMT) (Becker, 1971; Greenberg, et al., 1991) has generated testable hypotheses that have been replicated in at least six countries in over one hundred experimental studies. These findings suggest that culture serves as an essential psychological defense and that its traumatic disruption has predictable psychosocial consequences.

Why do groups of humans create and vigorously maintain a shared system of meaning believed to be an absolute representation of reality by its

adherents? Becker (1971, 1973) thought that humans, confronted with the terror that results from their existential circumstances, construct a shared conception of the universe that is symbolically created and maintained so that anxiety-prone human creatures may navigate in a terrifying existence with relative equanimity.

The purpose of this contribution is to offer a conceptual framework that may assist in assessing the meanings of symptomological indicators reported in this volume and to offer implications for fruitful intervention and support.

CONTEXT

Developmental-ecological models of human development rest on the principle that human development and its behavioral expressions are strongly influenced by context. The ecological model (Bronfenbrenner 1979, 1995; Bronfenbrenner & Crouter, 1983) posits four levels for classifying context. This classification begins with those ecologies the child interacts with directly (microsystems) such as the family and school and proceeding to social, cultural and historical forces that, while operating at a higher level of abstraction (e.g., mesosystem, exosystems and macrosystems), may powerfully impact human development and experience.

The macrosystem is conceived of as representing the broadest level of systemic influence. This contextual force includes the broad ideological and institutional patterns and events that define social reality and influence psychological experience and its behavioral manifestations. The macrosystem represents an overarching context that includes historical events such as colonization, decolonization, community, and cultural trauma (Salzman, 2001). The health and well-being of the people of the Pacific reported in this volume should be considered in this context.

Triandis (1994) noted the relationship of culture and behavior to the ecological context from which it is constructed:

Ecology—Culture—Socialization—Personality—Behavior

Ecology is construed as including physical environment, geography, climate, fauna, flora and containing resources such as fertile land, animals, oil, and metals. Economic and political systems contribute to the ecologies that contextualize human experience (Salzman, 2001b). This ecology and its resources make it possible for certain behaviors (i.e., cooperation while whaling in the Arctic or competitiveness in a capitalist economy) to lead to rewards. In this sense ecologically derived culture may be seen

as providing schedules of reinforcement that, indeed, make survival more probable. Behaviors that are rewarded become automatic and become the customs of the culture. The radical alteration of ecological realities, therefore, has cultural and behavioral consequences. Traumatic contact and colonization alter ecological-economic and cultural realities with predictable consequences (Fanon, 1968; Memmi, 1965; Napoleon, 1996). External forces that profoundly impact ecologies and cultures must necessarily impact socialization, behaviors, and experience. For example, domestic discord cannot seriously be considered without assessing the stressors affecting families in a particular historical moment or process.

The experience that Pacific Islanders had with through their contact with Europeans—subsequent colonization, depopulation, and cultural disruption—correspond to those of indigenous peoples throughout the Americas and have resulted in similar consequences. This contact and its attendant assaults by disease, military conquest, and economic and cultural disruption has produced similar consequences across vast distances and genetic inheritance. Peoples as genetically dissimilar as Yup'ik Eskimos, Athabaskan Indians, Hawaiian Natives, and Australian Aboriginals have experienced similar physical, social, behavioral, and psychological symptomologies (e.g., high rates of suicide, alcoholism, accidental death) as a consequence of contact with Europeans (Brave Heart & DeBruyn, 1998; Bushnell, 1993; Butlin, 1983; Farnsworth, 1997; Napoleon, 1996; IHS, 1995; Harris, 1990; Stannard, 1989). The enduring severity of these symptomologies invites a reconceptualization of the dynamics that produced them in order to provide new insight and inform intervention.

Salzman (2001a) suggested that the nature of this contact resulted in "cultural trauma." The traumatic disruption of indigenous cultures resulting from contact with European colonization is proposed as a powerful factor in the production of devastating psychological, social, and physical consequence among indigenous people because of an essential psychological function that culture serves. The concept of cultural trauma, based on TMT, illuminates the dynamics underlying the experience of indigenous peoples resulting from their historical experience with Europeans.

CULTURAL TRAUMA IN PACIFIC ISLAND NATIONS

Pre-Contact

The Pacific Ocean is the largest geographical feature on earth. It has a width of more than sixteen thousand kilometers, and the distance from the Bering Strait to Antarctica is more than fourteen thousand kilometers. It

contains approximately twenty-five thousand islands that exhibit diverse physical characteristics ranging from high volcanic islands and continental islands to low atolls and raised atolls. There is considerable cultural diversity as well as some variation and considerable similarity of experiences resulting from contact with Europeans and subsequent colonization.

The indigenous peoples that have historically populated the vast region produced cultures that evolved over many centuries. These cultures represent adaptations to a wide range of ecological realities and therefore manifest considerable variability (Howe, Kiste, & Lal., 1994). People develop cultures in response to both ecological demands and psychological necessities. The cultures developed over many centuries by the indigenous peoples of the region placed the individual in a profound inter-relationship with nature and the universe. The Australian aboriginal peoples, for example, developed a culture in a harsh and barren country where they established "...a perfectly valid way of life that had kept the race alive through unknown centuries of time. (They had) possessed the Greek quality of knowing one's place in the world (Moorehead, 1966, p. 133)."

The result was a profound sense of belonging and relatedness that was likely lacking in the worldview of Europeans, which held that the human was separate from nature and from "God" itself. The consequences of this "separateness" may well have fueled the motive for expansion, conversion of "different others," and conquest as compensation from the insecurity produced by such a perceived isolation from the natural world and divine power from which anxiety-prone humans seek resolution.

Contact and Its Consequences

"Everywhere contact with Europeans had deleterious consequences for Pacific Islanders" (Howe et al., 1994, p. 21). Numerous observers and scholars (e.g., Bushnell, 1993; Butlin, 1983; Farnsworth, 1997; Harris, 1990; Stannard, 1989) have reported on the effects of this contact. Initial contact seems to be invariably followed by the introduction of deadly and horrifying diseases to which islanders had no natural immunity. Although there is some variation of experience, the indigenous peoples of the Pacific experienced waves of epidemics that decimated and demoralized the population. For example, an epidemic of measles in Fiji in 1875 reduced the population by more than 25%. On Pohnpei, a similar tragedy killed 50% of the population, and in the New Hebrides the indigenous population was almost wiped out (Val, 1994). It was estimated that in 1788 there were about 1,500 aborigines around Sydney. Darwin, in 1836, found only a few hundred remaining, still trying to live their tribal lives among the colonists'

farms on the outskirts of the settlement but there were no animals left to hunt. In a few years they too had disappeared and all that was left were a few beggars in the Sydney streets. Darwin wrote, "Wherever the European has trod, death seems to pursue the aboriginal. We may look to the wide extent of the Americas, Polynesia, The Cape of Good Hope and Australia, and we find the same result" (Moorehead, 1966, p. 169).

The example of the devastation wrought by diseases resulting from contact and colonization in Alaska was reported by Fortune (1989). Napoleon (1996) described the resulting "Great Death" and its consequences among the Yup'ik people of western Alaska in the early part of the twentieth century.

> The suffering, the despair, the heartbreak, the desperation, and confusion these survivors lived through is unimaginable. People watched helplessly as their mothers, fathers, brothers, and sisters grew ill, the efforts of the *angalkuq* failing. First one family fell ill, then another. The people grew desperate, the angalkuq along with them. Then the death started, with people wailing morning, noon, and night. Soon whole families were dead, some leaving only a boy or a girl. Babies tried to suckle on the breasts of dead mothers, soon to die themselves. Even the medicine men grew ill and died in despair with their people, and with them died a great part of *Yuuyaraq*, the ancient spirit world of the Eskimo. Whether the survivors knew or understood, they had witnessed the fatal wounding of *Yuuyaraq* and the old Yup'ik culture. . . . The Yup'ik world was turned upside down, literally overnight.
>
> Out of the suffering, in confusion, desperation, heartbreak, and trauma was born a new generation of Yup'ik people. They were born into shock. They woke to a world in shambles, many of their people and their beliefs strewn around them, dead. In their minds they had been overcome by evil. Their medicines and their medicine men and women had proven useless. Everything they had believed in had failed. Their ancient world had collapsed. . . . The world the survivors woke to was without anchor. They woke up in shock, listless, confused, bewildered, heartbroken, and afraid. (pp. 10–11).

The traditional sources of power accessed by medicine people proved to be incapable of assuaging the horror of this sudden inexplicable death. The cultural teachings and prescriptions ("*Yuuyaruq*" which means "the way of the human being") of how Yu piks should be and act in the world seemed to be invalidated by the extent of the horror experienced by the people. This narrative describes cultural trauma. The common physical disasters experienced by indigenous peoples have had cultural, psychological, and behavioral consequences that have been transmitted across generations and experienced across the Pacific.

As a result of European contact and colonization of the Pacific, ecological and economic realities were radically altered. The deadly diseases that ravaged populations across the Pacific and the consequences of these traumatic events have left a legacy of despair that undoubtedly underlies such phenomena as the "suicide epidemic" in Micronesia (Val, 1994). Current realities cannot reasonably be assessed or addressed if they are decontextualized from relevant historical processes and current forces. The "Great Death" described by Napoleon (1996) echoed across the Pacific with devastating consequences. Moorehead (1966) noted that depopulation became a serious problem throughout the region and by the end of the nineteenth century it seemed to most westerners that Pacific Islanders were doomed to extinction.

Indigenous peoples became marginalized their own lands (e.g., resulting from the "Great *Mahele*" in Hawaii). Missionaries established Christianity and discouraged traditional beliefs and spiritual practices. Traditional cultures were denigrated and disrupted. Negative health and social indicators increased. In Hawaii, for example, Captain Cook landed in 1778. Hawaiians were soon assaulted with epidemics generated by imported diseases. In 1804 an epidemic claimed so may lives that the horror of it was so great as to be remembered for generations (see later discussion). Missionaries converted a horrified and demoralized population.

In Micronesia "violence, domination, exploitation and racism would all characterize to varying degrees the tenures of each metropolitan power that governed Micronesia at different times between 1886 and the outbreak of World War Two. Each colonizing nation would attempt to justify and enhance its rule through rituals of possession, denigrating descriptions of Micronesian society, the usurpation of indigenous political authority, and the promotion of alien, disruptive systems of religion, education and economy" (Hanlon, 1994, p. 93). The systematic denigration by colonial power of indigenous culture (a world of meaning) supported by institutional forces (e.g., military, education, legal) has had consequences.

THE CONTEXT OF COLONIZATION

The accurate interpretation of any phenomena can only be understood in the context within which it occurs. Colonization, the nature of the relationship between the colonizer and the colonized, and the psychosocial processes of decolonization is a highly relevant context from which to consider the data reported in this volume. Europeans colonized the Pacific region, from Alaska to New Zealand. Indigenous peoples (Bennett, 1994, Napoleon, 1996). In Micronesia, for example, "violence, domination, exploitation and racism would all characterize to varying

degrees the tenures of each metropolitan power that governed Micronesia at different times between 1886 and the outbreak of World War Two" (Hanlon, 1994, p. 93).

The nature of colonization and its consequences has been the subject of much investigation (Fanon, 1968; Memmi, 1991). Fanon (1968), a psychiatrist who studied the processes and effects of colonization and decolonization, noted that colonialism is a form of violence. The denigration of indigenous cultures and people, supported by military and institutional power, is often internalized by the colonized with devastating consequences. Fanon (1968) observed that that "When the Native is confronted with the colonial order of things he finds his is in a state of permanent tension. The settler's world is a hostile world which spurns the native" (p. 52). Fanon continues that "The settler keeps alive in the Native an anger which he deprives an outlet; the native is trapped in the tight links of the chains of colonialism" (p. 54). He observed from his clinical work colonial North Africa that "The colonized man will first manifest this aggressiveness which has been deposited in his bones against his own people (p. 52)."

Often, this tension is manifested in the family. This dynamic was stunningly portrayed in "Once Were Warriors (Duff, 1995)." This stress of the context, then, is manifested within families and communities and thereby transmits trauma across generations through such mechanisms as domestic violence and abuse. Memmi, (1991) in his classic work "The Colonizer and the Colonized," observed that it "is clear is that colonization weakens the colonized and all those weaknesses contribute to one another (p. 115)." Fanon (1968) also noted that the colonial system has the power to promote the internalization of negative evaluations that in fact become the self-concept of the colonized people. The effects of these dynamics are profound. Memmi (1967) described colonization as a "social and historical mutilation" (p. 96) that promotes feelings of inadequacy among the colonized thereby "damaging an essential dimension of the colonized" (p. 97). Inferiority feelings are devastating because they heighten anxiety and promote destructive compensations to alleviate this aversive state (Ansbacher & Ansbacher, 1946).

While the peoples of the Pacific have exhibited strength and resiliency in response to the stress of colonization, the extreme nature of that stress and its predictable consequences are enduring and seem undeniable. It is important to note that it is the colonial situation that manufactures the colonialist just as it manufactures the colonized. Since colonization has such devastating psychological consequences, then decolonization must necessarily be considered a psychological as well as political process. In response there have developed, across the Pacific, indigenous people's movements of self-determination and cultural renaissance recovery.

Terror Management Theory and Cultural Trauma

TMT (e.g., Becker, 1971; Greenberg, et al., 1991) considers the relationships among cultural factors, the terror inherent in human existence, and self-esteem. The authors of TMT have produced and replicated empirical evidence of the human tendency to bolster cultural worldview defenses in response to the anxiety aroused by experimental manipulations that make subjects aware of their own mortality ("mortality salience"). These consistent findings suggest that culture serves as a psychological defense against anxiety. The implications of this conclusion are profound and far-reaching. TMT appears to offer a powerful explanatory framework for understanding critical social and psychological phenomena occurring in naturalistic settings across persons, time, and place. Death, which is one of life's universal certainties, offers a solid theoretical anchor for TMT. All peoples address the universal fact of mortality in culturally specific ways. Death is a core existential concern (Yalom, 1980) for self-reflecting, future-projecting human creatures.

Salzman (2001a) briefly reviewed relevant empirical support for TMT (see Greenberg, Solomon & Pyszczynski, 1997; Solomon, Greenberg, & Pyszcynski, 1991 for review). Initial empirical assessments of TMT tested two hypotheses. The *anxiety-buffer hypothesis* and the *mortality-salience hypothesis* (Greenberg et al., 1997): The *anxiety-buffer hypothesis* states that if a psychological structure provides protection against anxiety, then augmenting that structure should reduce anxiety in response to subsequent threats. To test the hypothesis that self-esteem (the psychological structure) serves as an anxiety-buffer, TMT researchers manipulated self-esteem (or assessed it dispositionally), exposed subjects to a variety of threat (e.g., increasing subjects' awareness of their mortality) then measured (self-report and physiological measures) anxiety or anxiety-related behavior. Results indicated that higher levels of self-esteem led to lower levels of self-reported anxiety in response to a graphic death-related video and lower levels of physiological arousal in response to the threat of painful electric shock. Specifically, strengthening either self-esteem or faith in the cultural worldview would reduce anxiety and anxiety-related behavior in response to threat.

The *mortality-salience hypothesis* states that if a psychological structure provides protection against the terror inherent in human existence (knowledge of mortality), then reminding people of their mortality should increase their need for the protection provided by that structure by activating the need for validation of their sense of value (self-esteem) and their faith in the cultural worldview. This hypothesis was tested by exposing subjects to threat (mortality salience) and then measuring the subjects' tendency to

defend their cultural world-view by bolstering their commitment to their world view by how they responded to those who challenged or supported them. It was consistently found that subjects under mortality salience conditions responded more negatively to those who challenged their cultural worldviews directly or simply because they appeared different. It was also found that those who upheld subjects' worldviews would be evaluated more positively by subjects under the mortality-salience conditions than those who were not.

It is particularly interesting that Halloran & Kashima (2001) tested and replicated the mortality salience hypothesis with a non-western sample. Their results also showed that thoughts of their mortality motivated Aboriginal-Australian subjects to validate their cultural world-view and were consistent with previous evidence that mortality salience strengthened the tendency to reject those who violated norms prescribed by the relevant cultural world-view. Interestingly, another study showed that subjects whose world-views included tolerance (liberal judges) actually exhibited greater tolerance under the mortality-salience condition than presumably less tolerant subjects (conservative judges). These findings link the self-esteem anxiety-buffer to culture and its description of reality, indicating an essential psychological function served by culture(s). TMT, therefore, provides a useful lens through which to consider a wide range of social phenomena resulting from perceived threats to the cultural anxiety-buffer such as inter-group conflict, intolerance, and even genocide.

These hypotheses were supported by multiple experimental tests using varied operationalizations of the self-esteem, mortality salience, cultural world view, and anxiety variables. These findings have been replicated in the U.S., Germany, the Netherlands, Italy, Canada, Israel, and Australia (Aboriginal-Australian sample) and have profound implications. They link the self-esteem anxiety-buffer to culture and its description of reality. The focus here is on the experience of indigeous peoples whose cultures have been systematically assaulted and disrupted as a result of contact with European colonization. An understanding of these psychodynamics require consideration of fundamental aspects and dilemmas inherent in the human condition.

In the light of essential psychological functions of culture in managing the anxiety inherent in human existence (Becker, 1971; Greenberg, Solomon & Pyszczynski, 1997; Salzman 2001a), TMT suggests that the traumatic disruption of a peoples' culture results in unmanaged anxiety requiring compensatory actions (e.g., substance abuse) that may produce destructive consequences. As indicated, such maladaptive efforts to manage such anxiety may transmit the original trauma across generations through such mechanisms as domestic violence and abuse.

Although the terror derived from our awareness of mortality and the impossibility of achieving our basic biological motive to continue life is the foundation of TMT, I am not suggesting that this is the only motive for the construction of culture or human ontology. TMT is largely derived from the work of interdisciplinary scholar Ernest Becker (1971, 1973) who suggested that humans deal with the problem of mortality and vulnerability through the creation of culture. He perceived that self-esteem was a cultural construction and essential for the management of anxiety. He agreed with Adler (Ansbacher & Ansbacher, 1946) in considering self-esteem as the dominant human motive. Becker was also influenced by the thought of Otto Rank (1932) who posited that humans are influenced to twin ontological motives related to fitting in and merging with greater and more enduring power and individuating, transcending, or differentiating. These twin motives co-exist. TMT theorists propose a tripartite motivational system that supports the most basic of human motive for continued life (Pyszczynki, Greenberg & Solomon, 1997). These motives are:

- direct biological motives oriented to obtaining the biological necessities
- symbolic-defensive motives which are oriented toward controlling the potential for existential terror brought on by awareness of the ultimate impossibility of achieving the primary motive of continued existence.
- self-expansive motives, which are oriented toward growth and expansion.

Self-expansive motives do not stem from a sense of urgency, distress or a perception of deficit. Expansive motives involve a potential to derive pleasure from the maximal engagement of one's capacities with the environment. All of these motives co-exist and serve to make survival more probable. The motive to manage the terror inherent in human existence is particularly relevant to the concept of cultural trauma and shall serve as the foundation for this chapter. This essential psychological function of culture and the consequences of its disruption will now be considered from the perspective of T.M.T.

Universal Human Problems, Culturally Specific Solutions, and the Roots of Intolerance

According to TMT, self-esteem is culturally constructed. If the meaning constructing worldview described by culture and its prescribed standards are questioned then our personal value is questioned as well. When

the anxiety-buffer is shaken, compensatory responses are likely. Research (Greenberg, Solomon & Pyszczynski, 1997) indicates that when people's values are threatened they may try to reassert their faith in their worldview by bolstering their worldview through derogation, invalidation, or seeking to harm the different "other."

Cultures respond to common and important human problems differently. Cultures tell us how to relate to nature, what is the nature of our fellow humans, and what might we expect from them. Cultures indicate what personality characteristics are most valued, and what time/space dimension is most relevant for human action. Perhaps most importantly for anxiety-prone human creatures, cultures describe the nature of the hierarchy of power and where one fits in that hierarchy (Kluckhohn & Murray, 1953).

The varying answers that cultures provide to these critical and common human problems contextualize Becker's (1971) proposition that cultural differences are threatening because they threaten the faith of anxiety-prone humans in the validity of the heroic, death-denying, transcendental meaning systems that allow for adaptive action in a terrifying world. Cultural relativity and multiculturalism create anxiety because they raise the possibility that our cultural/religious meaning system through which we derive our anxiety-buffer (culturally derived self-esteem) is largely fictional. It is not surprising, then, that exposure to cultural relativism and multicultural perspectives produce such vigorous, anxiety-driven reactions as the willful and often brutal conversion of Native peoples to European worldviews. The anxiety-driven need for absolute faith in one's worldview, given the high psychological stakes involved, can produce murderous reactions as well as serve to sustain people through their anxiety-prone existence.

It seems that human differences on essential existential human concerns provide a context and tendency for intolerance. The colonizers' perceived need to either convert or eliminate (e.g., Tasmania) indigenous peoples may be seen in this light. In summary:

- Indigenous cultures have been traumatically disrupted as a result of contact with Europeans.
- Culture serves as a psychological defense against existential terror. If that defense is disrupted, anxiety is produced.
- People are motivated to bolster their worldview and derogate the culturally different under existential threat (e.g., mortality salience).
- Culture is a source of meaning and anxiety-buffering self-esteem.
- Absent a cultural anxiety-buffer, maladaptive attempts to manage anxiety may produce further tragedy and grief.

- Grief may be unresolved when traditional cultural solutions are suppressed or "lost," contributing to the multi-generational transmission of trauma.
- When tolerance is a high value within a worldview, it is bolstered under existential threat (mortality salience).

TERROR MANAGEMENT THEORY APPLIED

Cultural Trauma and the Cultural Anxiety-buffer

Solomon et al. (1991) suggest that there may be circumstances under which individuals cannot maintain the cultural anxiety-buffer, either because they cannot achieve a sense of value within the cultural drama, or because their faith in the cultural drama itself is shattered.

The *anxiety-buffer hypothesis* states that if a psychological structure functions to provide protection against anxiety then strengthening that structure should make one less prone to exhibit anxiety and anxiety-related behavior in response to threats. Weakening that structure, therefore, should make one more prone to engage in such anxiety-related behaviors as the numbing abuse of alcohol and other substances with similar effects. The implications of this well-tested hypothesis shed light on the experience of indigenous peoples whose cultures have been traumatically disrupted by contact with Europeans. These effects have been documented in such genetically different populations as the Maoris of New Zealand (Walker, 1990), Hawaiian Natives (Bushnell, 1993; Kuykendall, 1938; Stannard, 1989), Australian Aborigines (Brady, 1990), Alaska Natives (Fortuine, 1989; Napoleon, 1996) and American Indians (Miller & Hazlett, 1996). All of these peoples suffer alcohol problems very similar to those endured by American Indians.

In terms of TMT, indigenous people lost faith in their worldview; the people were left without a psychological buffer against the terror inherent in human existence. No anxiety-buffering self-esteem could be derived from meeting the standards of culturally prescribed worldview that had been apparently invalidated with the possibility of faith and belief shattered. It follows that the people so affected were subject to overwhelming anxiety and negative affect. The motive to alleviate this aversive condition is powerful and potentially destructive to self and others because, absent a positive and enduring source of self-esteem, an anxiety-prone human will seek any available anxiety-buffer. Anxiety-numbing and depression-alleviating substances may offer temporary relief while insuring greater

pain. Tragedy and grief compound as self-defeating solutions deepen the emotional pain.

The devastating loss of population due to disease resulting from contact with Europeans was experienced throughout indigenous America and the Pacific (Bushnell, 1993; Farnsworth, 1997; Napoleon, 1996). It is instructive to examine the experience of the Hawaiian people whose different genetic and ecological inheritance make comparisons fruitful.

Cultural Trauma: The Hawaiian Experience

Bushnell (1993) describes a pre-contact Hawaii as having a population of between 200,000 to 300,000 Native Hawaiians. He cites another source who estimated a population of between 800,000 to 1,000,000 (Stannard, 1989). The impact of contact is described as disastrous by Stannard.

> "Their society was shattered, and as it died death came for its people in many guises which they could neither recognize or combat". (p. 65)

This sudden, incomprehensible disaster was apparently understood in the same way that the Yup'ik understood their "Great Death" (Napoleon, 1996). The answer to that crucial attributional question "Why?" was self-blame. It was interpreted in terms of the conceptions of health and illness described by their worldview. It was concluded that they must have done something terribly wrong. Stannard writes:

> "Hawaiians believed that health, prosperity and happiness were the rewards of piety, reverence for the gods, respect for the kapus (prescriptions for appropriate behavior and being). Sickness, poverty, and misfortune were punishments imposed directly or indirectly by the gods for having broken their kapus. A man prospered when his mana, his spirit power given him by the gods was not burdened with guilt or depleted by offenses against kapus. When his mana was weakened for any cause whether by his own act or the decree of an affronted god . . . he suffered." (p. 65)

The elaborate Native system of medicine was overwhelmed by imported microbes. Contact with Europeans beginning with Captain Cook in 1778 challenged the power of the gods and the great chiefs, and new diseases ravaged the population. Cultures, as has been stated, ask common questions that are answered differently. A key question for anxiety-prone humans is "what is the hierarchy of power and where do I fit in" (Kluckhohn, 1953)? It is reasonable that the anxiety-prone human seeks identification with the highest power in the hierarchy. The power hierarchy understood through the traditional worldview of Native Hawaii was

assaulted and invalidated as a consequence of contact. Of course, militant opposition to Native healers and medicines was declared by American missionaries almost as soon as they arrived in 1820. By then the foreign micro-organic invasion had begun to sow incomprehensible devastation. Wave upon wave of epidemics struck the people. In 1804 the "ma'oku" claimed so many lives that the horror of it was so great as to be remembered for generations even after other plagues had assailed the Hawaiians. This terrible foreign disease appeared first on Oahu then spread swiftly among the people decimating the population (Kuydendall, 1938).

The missionaries, as they did with Alaska Natives, assisted the Hawaiians in directing the attribution of the cause of this disaster to self and to their presumed sinful religious beliefs and practices. The internalization of responsibility for causing such unspeakable horror may have been a key source of the multigenerational transmission of trauma. The Hawaiian "Great Death" had begun. Davis (1968) reported that:

> "(Hawaiian) Natives understood that their old gods had abdicated in favor of a single new god with a new set of kapus. They knew that the Christian God watched them and that he wanted them to do right; and they knew that they had all done wrong." (p. 38)

After years of epidemic diseases that had cut like a giant scythe through the Native population, the ultimate extinction of the Hawaiian people "came to be generally thought of as inevitable" (p. 86). It is estimated that there was a population decline of more that 166,000 Hawaiians between 1778 and 1823 (Adams, 1937). All of this devastation and misery occurred within forty years of exposure to Europeans.

Old Hawaiian customs previously bonded together by ancient Polynesian beliefs, now fractured by the overthrow of the traditional religion, were collapsing at all levels. As a result of the void that appeared, self-esteem among the understandably bewildered Hawaiians plunged to a new low (Dougherty, 1992).

The worldview was shattering and being invalidated and, in TMT terms, anxiety-buffering self-esteem was becoming inaccessible, leaving the anxiety-prone humans to cope with these aversive conditions by whatever means were accessible. Anxiety-related behaviors would be expected to increase under such conditions.

The old culture of the Hawaiians, its worldview, and its standards for living and being did not simply cave in. The traditional Hawaiian healers, the embodiment of the worldview, fought back with every tool they possessed. There was an increase in the training and production of indigenous healers. The worldview, as TMT would predict, was defended with increased vigor. They struggled and lost. As Bushnell (1993) notes:

> "But what ever course the kahunas chose to follow proved inadequate to meet the needs of their people. They were cut down, not by their ignorance (as foreigners asserted), but by ruthless adversaries . . . . the disease-producing microorganisms introduced among Hawaiians by foreigners aggravated by the extreme susceptibility of the Hawaiian people to those invisible invaders. Before foreigners arrived with their poxes and pyrexias, native physicians with their methods of diagnosis and regimes of therapy apparently were providing adequate care for the ailment of indigenous Hawaiians." (p. 131)

Indigenous peoples and the cultures that have supported them psychologically have been traumatized by contact with European peoples. This contact and its attendant assaults by disease, military conquest, economic exploitation and systematic cultural disruption have produced similar consequences across vast distances and genetic inheritance. In response to these traumatic events and their consequences cultural recovery movements and accompanying political movements such as the Hawaiian sovereignty movements have been energized to assist peoples in regaining their health and well being. Relevant examples cited by Salzman (2001) will follow.

CULTURAL RECOVERY: THE RECONSTITUTION OF A WORLD OF MEANING

The traumatic disruption of the collective psychological defense that is culture produces predictable consequences in the increase of anxiety and the motivation to engage in anxiety-reducing behaviors. Maladaptive anxiety reduction strategies may have the momentary desired effect while serving to produce additional sources of grief, pain, and tragedy (Department of Education, 1993). Efforts toward cultural recovery and a reconstitution of a world of meaning in which to act represent an important motive to restore the essential psychological prerequisites for adaptive action. Indigenous people with similar histories of traumatic cultural disruption are seeking to identify and operationalize bedrock principles and values that define their being and guide their action. The movement towards cultural recovery is happening across vast distances in geography and genetic inheritance. This section will explore the efforts of Native Hawaiians to restore the cultural foundations of life and to adapt them to current conditions. Efforts to identify and apply traditional values and principles to the domains of education and mental health are vital and ongoing.

All cultures have specific means and rituals for addressing the universal problems of death and grief. Absent access to one's deeply rooted

mechanisms for dealing with this existential problem grief is, in Braveheart and DeBruyn's (1998) words "unresolved." Unresolved grief, without access to deeply resonant ceremony and ritual designed to address grief, produces maladaptive efforts to address the pain (e.g., alcohol abuse), which only produces more tragedy and grief thereby facilitating the multigenerational transmission of trauma.

Ho'oponopono: A Hawaiian Solution

The ancient Hawaiian concept of *Ho'oponopono* is currently being used to restore and maintain good family relationships (Shook, 1985). *Ho'oponopono* is a method for restoring harmony that was traditionally used with the extended family. It seeks to restore and maintain good relationships among family, and the family and supernatural powers. The metaphor of a tangled net has been used to illustrate the problem situation and its dynamics. The family is seen as a complex set of relationships where any disturbance in one part of the net will affect the rest of system. This metaphor reinforces Hawaiian philosophy and its emphasis on the interrelatedness of all things (Shook, 1985).

Part of *Ho'oponopono* addresses internalized negative evaluations of being Hawaiian and works to eliminate shame while promoting the acquisition of traditional concepts of healthy relationships and pride in Hawaiian culture. The use of Ho'oponopono has a spiritual aspect through the use of prayers and a process of *mihi* and *kala* or forgiveness and the unbinding of the *hala* or fault (Honolulu Star Bulletin, 1971). This practice, though consistently used in pre-contact times has been revived and is an expression of the cultural renaissance described by Kanehele (1982). It is noteworthy that those elements of *Ho'oponopono* most influenced by traditional Hawaiian religious beliefs were most subject to abandonment and were replaced by Christian beliefs and the use of the bible.

Kanehele (1982) saw the process of recovering and the reconstruction of Hawaiian culture as a psychological renewal and a purging of feelings of alienation and inferiority as well as a reassertion of dignity. The revalidation of one's culture and its standards for being and living in the world serve to strengthen the essential anxiety-buffering function of the culture. The revival of hula, language study, music and traditional forms of healing such as *Ho'oponopono* serve to reconstruct a world of meaning for people to act in and achieve anxiety-buffering self-esteem through the meeting of accessible standards of value defined by a world view infused with new belief.

Kanahele (1982) notes similar cultural activism occurring throughout the Pacific Islands. As a result of these efforts to reaffirm and recover the

cultural foundations of living and being "Hawaiians regard themselves, generally speaking, a lot better and with a greater sense of identity, self-assurance, and pride" (p. 7). Self-assurance, pride and confidence are conditions that make adaptive action more probable in a wide variety of contexts including those imposed by current conditions.

Since, as indicated, colonization has political, cultural and psychological consequences then the remedy (decolonization) must involve these dimensions. Universities in a colonial system, for example, seek to assimilate Native people the dominant culture's ideology, version of history and epistemology. In a process of decolonization these institutions must at least accommodate the perspectives, sources of knowledge and learning styles of the formerly colonized people. One method that may assist institutions in that accommodation has been called an Intercultural Sensitizer (ICS). Dela Cruz (2001) developed an ICS designed to sensitize non-Native university personnel to the attributional perspectives of Hawaiian students to intercultural interactions occurring at institutions of higher education.

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Implications

The implications of TMT and the interdisciplinary work of Ernest Becker (1971, 1973) that inspired it are considerable. The empirically supported observation that people tend to bolster their cultural worldview under the threat of mortality awareness may plausibly be characterized as a defensive response to the terror inherent in the existence of self-conscious human creatures. Culture, then, is a psychological defense cooperatively constructed to manage existential terror and allow anxiety prone human organisms to act adaptively. Self-esteem is an essential anxiety-buffer and self-esteem is a cultural construction. Culture is a roadmap that tells us how to live and what kind of person to be in order to see ourselves as having value and significance in a meaningful world thereby achieving the necessary anxiety-buffer.

Traumatic disruption of culture, as has been the case of indigenous people throughout the world, places people in psychological jeopardy due to a flood of negative affect (e.g., anxiety). Attempts to address this aversive condition include maladaptive and destructive anxiety-related behaviors such as alcohol abuse that are maintained through negative reinforcement. Such attempts to manage the anxiety provide temporary relief from the aversive condition but tend to produce further tragedy and grief.

Traditional remedies for the universal problem of grief are often unavailable due to colonial suppression of or loss of faith in the culture. The grief remains unresolved and the destructive compensatory responses further the transmission of the original trauma across generations with compounding effect. Cultural recovery movements and associated political struggles are an effort to regain health through the reconstruction of a world of meaning to act and be in that affords anxiety-prone humans with the essential anxiety-buffer that makes adaptive action more probable. Mental health and social work practice on the individual and community levels must deal with this psychological defense respectfully, carefully and in concert with an ongoing assessment of its functionality and meaning.

In view of the preceding discussion, we must consider the appropriate level of intervention and analysis when working with people who are experiencing the consequences of cultural and communal trauma. Community, group and individual level intervention and services could be provided separately or in combination. The construction and maintenance of a world of meaning with achievable standards through which anxiety buffering self esteem may be achieved is a community enterprise as the individual continually seeks support and validation for the world view that supports him/her psychologically.

Individual counseling and therapy may support a community level intervention and effort. The role of the mental health professional may be in support of the collective and individual construction of meaning that sustains adaptive action. Mental health and social workers should not, without informed consent, function as an assimilation agent for the dominant culture. There are alternatives to the destructive assimilationist approaches historically employed by educational and mental health systems.

The perspectives of the existential school of psychotherapy may be particularly useful in assisting people(s) whose world of meaning has been traumatically disrupted and even shattered. This perspective emphasizes the need to construct and infuse one's world with meaning. It is only in a world of meaning that anxiety-buffering self-esteem may be derived. The task of the multiculturally competent mental health and social workers might be to identify high, culturally prescribed standards, and assist the culturally different (or similar) client to achieve one or more of those standards. For example, the core Hawaiian values of *aloha* (love), *lokahi* (harmony, unity), *laulima* (sharing), and *kokua* (help) have been identified (Marsella, Oliviera, Plummer, & Crabbe, 1995). Individual, group and/or community level work could assist people in operationalizing these values and expressing them in their lives. If successful, such an approach would

assist clients in achieving anxiety-buffering self-esteem and increase the probability of adaptive action. This proposition could be tested.

TMT suggests that if a person has faith in a cultural world view and sees oneself as living up to its standards then that person will have access to anxiety-buffering self-esteem thus making adaptive action more probable. Therefore, persons, groups, or communities who, in terms of racial/cultural identity (Helms, 1990), are at the self and group (culture) appreciating Immersion Stage or higher would have the prerequisite faith in a cultural world view and could be helped to achieve the culturally prescribed standards and then see oneself as having value. This condition would enable people to achieve the essential anxiety-buffer. Similarly, the client who identifies with the dominant culture's world view and is not impeded from living up to its standards by social impediments (i.e., racism) may also achieve anxiety-buffering self-esteem. In this case it becomes imperative to address and remove those barriers. Mental health and social workers must, then, become tireless advocates for social justice so that the dominant culture allows accessibility to its standards of value for believers in that world view.

Accessibility to both systems makes biculturalism a viable option. The bicultural alternation model (LaFromboise, Coleman, & Gerton, 1993) allows for the development of bicultural competence without sacrificing ones original cultural foundations. Group counseling organized around the development of bicultural navigation skills could assist in the development of this behavioral and psychological option. Community level interventions are essential because the construction of meaning and a world of meaning is a communal enterprise as well as one's existential responsibility. The RHSP requires students in their practica to develop such community level interventions. These have included the development of weekly family nights that featured traditional games, storytellers, crafts and other cultural activities. Radio programs that broadcast traditional stories and their embedded meanings are reaching people seeking to regain their sense of culture and place.

The diagnostic implications that may be derived from this review and analysis include the possibility of a new category of trauma disorder. The commonality of the psychological and behavioral consequences of contact with European colonization inspires an important question. Can we think of this common cluster of symptoms and historical experience among genetically dissimilar peoples as a clinical syndrome. "Cultural Trauma Syndrome" might offer conceptual coherence to the common suffering experienced by peoples whose cultural foundations have been assaulted and disrupted as well as inform treatment and recovery efforts. Movements by

indigenous peoples around the globe to recover and reaffirm culture are consistent with such a conceptualization.

Recommendations for Policy, Practice and Research

In view of the preceding discussion the following recommendations are offered:

- Respect culture as a necessary psychological defense and design interventions accordingly.
- Educational institutions should be "decolonized" by including and valuing indigenous sources of knowledge and responding to the attributional perspectives of indigenous students and faculty (e.g., Dela Cruz, 2001).
- Promote interventions emphasizing meaning construction at the community level and support the collective (community) and individual construction of meaning that sustains adaptive action.
- Assist individuals and communities in the identification of standards and values within cultural worldview that promote adaptive action in current realities. For example, the concept of "warrior" and the characteristics of courage and competence are transferable to current realities. The methodology used in the construction of the Native Hawaiian Intercultural Sensitizer (Dela Cruz, 2001) also allowed for and promoted the deeper exploration of Hawaiian culture by the Native participants in the study.
- Help clients develop bi-cultural navigation skills identified through research. The need to function competently in the Western world being grounded and competent in one's foundational culture is widely acknowledged among Native peoples.
- Consider the validity of a "cultural trauma syndrome" describing a common cluster of symptoms suffered by peoples who experienced traumatic cultural disruption
- Assess elements of worldviews that promote derogation of the "other" and educate for tolerance and respect for diversity early and continually throughout schooling.
- Assist communities in cultural recovery efforts through collaborative content analysis of traditional stories. A world of meaning and prescriptions for living a good and valuable life are often contained in a peoples' traditional stories. These stories describe the personality and behavioral characteristics that the culture values and defines as worthy of respect. Such stories are a rich repository of the kinds of prescriptions of being (ontological prescriptions) and doing that, if

actualized, provide a person with the essential anxiety-buffer. Such an inquiry would require the participation of cultural consultants in order to accurately assess the meanings and behavioral prescriptions embedded in the stories.

- Colonization has political, cultural and psychological consequences; the remedy (decolonization) must involve these dimensions. Universities in a colonial system, for example, seek to assimilate Native people the dominant culture's ideology, version of history and epistemology. In a process of decolonization these institutions must a least accommodate the perspectives, sources of knowledge and learning styles of the formerly colonized people.
- Assess effects of people's cultural recovery and political empowerment on behavioral, health and social indicators.
- Cultural recovery movements are occurring among indigenous peoples throughout the world to reconstruct a world of meaning to act in, to make anxiety-buffering self-esteem accessible, and to recover ceremonies and rituals that address life's problems. These movements and their corresponding political expressions (e.g., sovereignty) should be supported.

In conclusion, humans beings are anxiety-prone, meaning seeking and meaning constructing organisms. Culture infuses the world with meaning. It is only in a world of meaning that humans can derive a sense of value and significance that contribute to a "buffer" against the terror inherent in human existence. That buffer has been called self-esteem. Ways in which anxiety-buffering self-esteem may be achieved are prescribed by cultures and vary in their construction across cultures. Humans need to feel they have value in a meaningful world. The traumatic disruption of culture place humans in psychological jeopardy due to unmediated existential terror. Maladaptive strategies for anxiety management such as substance abuse, domestic violence and power-seeking behaviors promote tragedy, grief and the multi-generational transmission of the original trauma (e.g., contact, death, colonization). Recovery has political and psychological aspects. Recovery is occurring throughout the indigenous world. To paraphrase Bob Dylan, non-Native mental health and social workers who cannot assist this process should get out of the way.

REFERENCES

Adams, R. (1937). *Peoples of Hawaii*. Honolulu, HI: Institute of Pacific Relations.

Ansbacher, H. & Ansbacher, R. (1946). *The individual psychology of Alfred Adler.* New York: Basic Books.

Becker, E. (1971). *The birth and death of meaning (2nd edition).* New York: Free Press.
Becker, E. (1973). *The denial of death.* New York: Free Press.
Bennett, J.A. (1994). Holland, Britain, and Germany in Melanesia. In K.R. Howe, R.C. Kiste & B.V. Lal (Eds.), *The tides of history: The Pacific islands in the twentieth century (pp. 40–70).* University of Hawaii Press. Honolulu: HI.
Brady, M. (1990). Indigenous and government attempts to control alcohol use among Australian aborigines. *Contemporary Drug Problems. 17*, 195–202.
Braveheart, M.Y.H. & DeBruyn, L.M. (1998). The American Indian holocaust: Healing historical unresolved grief. *American Indian and Alaska Native mental Health Research: The Journal of the National Center, 8 (2)* 56–78.
Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen. G.H. Elder, Jr., & K. Lushcer (Eds.). *Examining lives in context*. (pp. 619–647). Washington, D.C: American Psychological Association.
Bronfenbrenner, U. & Crouter, A.C. (1983). The evolution of environmental models in developmental research. Pin P.H. Mussen (Series Ed.) & W. Kessen (Vol. Ed.). *Handbook of child psychology: Vol. 1. History, theory, and methods.* (4th ed.), (pp. 357–413).
Bushnell, O.A. (1993). *The gifts of civilization: germs and genocide in Hawaii*. Honolulu, HI: University of Hawaii Press.
Butlin, N.G. (1983). *Our original aggression*. Sydney, Australia: Allen & Unwin.
Dawes, G. (1968). *A shoal of time: History of the Hawaiian Islands*. Honolulu, HI: University of Hawaii Press.
Doughety, M. (1992). *To steal a kingdom*. HI: Island Style Press.
Department of Education (1993). *Hawaii Youth Risk Behavior Survey Report*. Department of Education, Office of Instructional Services/General Education Branch. Honolulu, Hawaii.
Dela Cruz, K.C. (2001). *Native Hawaiian attributional perspectives to intercultural interactions in higher education: Developing a Native Hawaiian intercultural sensitizer.* Unpublished master's thesis, University of Hawaii, Honolulu, Hawaii.
Duff, A. (1995). *Once were warriors*. Vintage International. New York, N.Y.
Fanon, F. (1968). *The wretched of the earth*. Grove Press. New York, N.Y.
Farnsworth, C.M. (1997). Australians resist facing up to legacy of parting aborigines from families. *New York Times, June 8, 1997, p. 10*.
Fortune, R. (1989). *Chills and fever: Health and disease in the early history of Alaska*. Anchorage, AK: University of Alaska Press.
Greenberg, J., Solomon, S. & Pyszczynski, T. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements. In M.P. Zanna (Ed.) *Advances in experimental social psychology, 29 (pp. 61–139)*. San Diego, CA: Academic Press, Inc.
Halloran, M. & Kashima, E. (2001). *The effects of mortality salience on the endorsement of collectivist and individualist values in contexts defined by social identities.* Unpublished manuscript. Swinburne University of Technology.
Hanlon (1994). Patterns of colonial rule in Micronesia. In K.R. Howe, R.C., Kiste & B.V. Lal (Eds.), *The tides of history: The Pacific islands in the twentieth century (pp. 93–118)*. University of Hawaii Press. Honolulu: HI.
Harris, J. (1990). *One blood: 200 years of aboriginal encounter with Christianity: A story of hope.* Sutherland, Australia: Albatross Books.
Helms, J. (1990). *Black and white racial identity.* Westport, CT: Greenwood Press.
Ho'oponopono: A way to set things right. (1971, July 18). *Honolulu Star Bulletin,* p. B-8.

Howe, K.R., Kiste, R.C. & Lal., B.V. (Eds.). (1994). *Tides of history: The Pacific Islands in the twentieth century*. St. Leonards, N.S.W.: Allen & Unwin,

Indian Health Service. (1995). Trends in Indian health. *U.S. Department of health and Human Services*. Washington, D.C.

LaFromboise, T., Coleman, H.L.K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, 114, 395–412.

Kanahele, G.S. (1982). *Hawaiian renaissance*. Honolulu, HI: Project WAIAHA.

Kluckhohn, C., & Murray, H.A. (1953). *Personality in nature society and culture (2nd ed.).* New York: Alfred A. Knopf.

Kuydendall, R.S. (1938). *The Hawaiian kingdom 1.* Honolulu, HI: University of Hawaii Press.

Marsella, A.J., Oliviera, J., Plummer, M., & Crabbe, K. (1995). Hawaiian culture, mind, and wellbeing. In H. McCubbin, E. Thompson, & A. Thompson (Eds.) *Stress and resiliency in racial and minority families in America (pp. 93–114)*. Madison, WI: University of Wisconsin Press.

Miller, R.J. & Hazlett, M. (1996). The drunken Indian: Myth distilled into reality through federal Indian alcohol policy. *Arizona State Law Journal. 28,* 28.

Mohatt, G. & Salzman, M. (1995). Cultural and ethnic issues in rural mental health: Rural human services certificate project. In D.F. Mohatt & D.M. Kirwan (eds.) *Meeting the challenge: Model programs in rural mental health (pp. 17–24)*. National association for rural mental health for the office of rural health policy. United States Public Health Service.

Moorehead, A. (1966). *The Fatal Impact: An Account of the Invasion of the south Pacific, 1767–1840*. New York. Harper & Row.

Memmi, A. (1991). *The colonizer and the colonized*. Beacon Press. Boston: MA.

Napoleon. H. (1996). *Yuuyaraq: The way of the human being. AK:* University of Alaska Fairbanks, Alaska: Native Knowledge Network.

Pyszczynski, T., Greenberg, J., & Solomon, S. (1997). Why do we need what we need? A terror management perspective on the roots of human social motivation. *Psychological Inquiry: An international journal of peer commentary and review, 8*, 1–20.

Rank, O. (1932). *Art and artist: creative urge and personality development*. Knopf: New York.

Salzman, M. (2001a). Cultural trauma and recovery: Perspectives from terror management theory. *Trauma, Violence & Abuse 2* (2), 172–191.

Salzman, M. (2001b). Globalization, culture and anxiety: *Journal of Social Distress and the Homeless, 10* (4), 337–352.

Shook, V.E. (1985). *Ho'oponopono: Contemporary uses of a Hawaiian problem-solving process.* Honolulu, HI: East-West Center.

Solomon, S., Greenberg, J, & Pyszcynski, T. (1991). A terror management theory of social behavior: The psychological functions of self-esteem and cultural worldviews. In M.P. Zanna (Ed.), *Advances in experimental social psychology (pp. 91–159)*. San Diego, CA: Academic Press, Inc.

Stannard, D.E. (1989). *Before the horror.* Honolulu, HI: Social Science Research Institute, The University of Hawaii.

Triandis, H.C. (1994). *Culture and social behavior.* New York: McGraw-Hill, Inc.

Walker, R. (1990) *Ka Whawhai tonu matou—Struggle without end.* Auckland: Penguin Books.

Val, B.V. (1994). The passage out. In K.R. Howe, R.C. Kiste & B.V. Lal (Eds.), *The tides of history: The Pacific islands in the twentieth century (pp. 435–461).* University of Hawaii Press. Honolulu: HI.

Yalom, I. (1980). *Existential psychotherapy*. New York: Basic Books.

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Chapter 4

Globalization of Human Services for Indigenous Youth in the Northern Territory, Australia

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INTRODUCTION

The primary backdrop for any discussion of Indigenous human services, and the needs that create them, is the "global community" in which we all now live (Marsella, 1998). That community is increasingly characterized by at least three major pressures operating on those services and the clients who use them (Hermans & Kempen, 1998). "Globalization" can be broadly defined as any movement towards global norms, for example in consumer services (e.g., fast food), commercial services (e.g., credit facilities), and educational services (e.g., instruction in English). "Localization" is often a reactance to globalization, as local groups seek to reassert their traditional norms, for example by reinstating traditional languages in their schools (Bolitho, Carr, & O'Reilly, 2000). "Glocalization" is the normative hybrid that results from any *interaction* of globalization and localization (Robertson, 1995). For example, health service programs can be a pluralistic meld of Western and traditional practices, like medical services for Aboriginal clients that are staffed and run mainly by Aboriginal people (Rowse, 1993).

Such glocalization of human services reflects the fact that client consumers of human services are becoming more pluralistic and complex behaviorally (MacLachlan & Carr, 1994). A critical consideration arising here

is the degree to which human services match, or "fit" the level of behavioral pluralism in those clients (Carr & MacLachlan, 1996). Nowhere is that consideration more critical than for Indigenous youth, who are by definition relatively exposed to the cultures and counter-cultures of globalization and localization (Pearson, 1999). This chapter, therefore, adopts a glocal perspective to explore the degree of fit between human service provision and human service needs for young Indigenous Australians. Whilst the chapter focuses on alcohol and other drugs, it also considers related human service issues, including domestic violence and suicide.

A "Bicultural Self?

As the above examples clearly indicate, glocalization is really a question of social identity, or more precisely possessing psychologically diverse identities (Gergen, 1991). Consumers of goods and commodities, and of human services related to such consumption, can and will identify with both tradition and modernity, local and global (Rugimbana, Zeffane, & Carr, 1996). In that sense, they have developed beyond both assimilation and cultural revivalism (Tajfel, 1978). In one Australian study for instance, underage (<18 years) Indigenous youths' main reasons for drinking alcohol were no different from the reasons given by non-Indigenous youth, or by Indigenous and non-Indigenous youth outside of Australia. For example, they both cited camaraderie and gaining confidence with the opposite sex as major reasons for their drinking (Living With Alcohol, 1999). These might be termed *global* normative concerns for young people. Yet in the same study, in those remote Indigenous communities with strong traditional and social norms, such as active Elders and active community groups, under-age drinking was less frequent. This combination of findings, reflecting dual identification perhaps, indicates a role in human service provision for local agencies of influence as well as global ones, like the "culture of youth" (1999, p. 10). Thus, when we look closely at drug-related behavior and human services, we see that the service consumer is socially and behaviorally complex, and cannot legitimately be compartmentalized simply as "non-Indigenous" versus "Indigenous," or "Aboriginal" versus "non-Aboriginal."

Deconstructing Indigenous vs. Non-Indigenous/Aboriginal vs. Non-Aboriginal

As is widely discussed in the literature on discourse analysis, compartmentalizing terminology like this can do more harm than good (Dudgeon & Pickett, 2000). In using it, a wide diversity of groups (over 200 within

Australia alone) are socially constructed as "the non-Indigenous" (Davidson, Sanson, & Gridley, 2000), whilst an equal, if not greater diversity, of Aboriginal and Torres Strait Islander groups (see below) are homogenized into "the Indigenous" (Williams, 2000). Such convenient mental heuristics create a culturally diverse 'in'-group on the one hand, and a culturally homogenous 'out'-group on the other (Linville, Fischer, & Salovey, 1989). 'Exclusive' multiculturalism like this is liable to promote inter-group stereotyping, prejudice, and discrimination (Pratto, Sidanius, Stallworth & Malle, 1994). Cultures are liable to be implicitly blamed, and to that extent held solely responsible for 'fixing,' their own poverty, which we might describe as an "ultimate cross-cultural attribution error" (Sidanius & Pratto, 1999, p. 88).

In the context of human services to Indigenous Australia for instance, deliberate moves by the government to have human services "indigenized" have shifted the burden of service provision onto local communities themselves (Public Health Strategy Unit, 1997). Politically, this kind of policy prematurely or preemptively deprives remote Indigenous communities of equal access to human services, services that have been extensively developed elsewhere and which by definition may have been at least partially appropriate for younger clients whose orientation is partially global (Leonard, 1997).

Psychosocially, such policies might well partly reflect cross-cultural attribution errors, which would be less likely perhaps if non-Indigenous writers and readers constantly reminded themselves that before the arrival of non-Indigenous peoples in Australia, there are estimated to have been 750,000 Indigenous people, living in approximately 700 different groups, each of which had its own territory, political and economic system, laws, and language system (Wessells & Bretherton, 2000). Australia continues to be populated by an incredible variety of culturally disparate groups across the continent as a whole. Across the Top End of the Northern Territory alone, there are 200 different communities (Northern Land Council, 2001). Even those communities themselves, as in other communities across Australia as a whole, are a bit of a fiction. They are actually a legacy of remote Aboriginal and Torres Strait Islander 'reserves' and mission stations, dating from a wave of globalization by the British Empire, which took place in the late 19th and early 20th centuries. Because of this colonial history, and the various local groups and sub-groups that continue to resist it, there is today as much diversity *within* community groups as *between* them (Brady, 1991).

Reconstructing "Indigenous"

Despite the omnipresent risks inherent in the terms "Indigenous" and "non-Indigenous" (or "Aboriginal" and "non-Aboriginal"),

Indigenousness and Aboriginality are central to our concerns in this chapter, which means that we have to find an acceptable sense in which it can be legitimately used. One sense in which the terminology *does* seem to be appropriate is to connote the fact that many Indigenous (or Aboriginal and/or Torres Strait Islander) people, for whom their particular identity is always very important, also share a sense of "Aboriginality as *resistance*" (Clark, 2000, p. 151, emphasis added). This sense of oneness and resistance is partly demonstrated by the widespread acceptance, across Australia, of a standard procedure for identifying Indigenous people based on *self-reported Indigenous origin*.

The reasons why this kind of Aboriginality, or Indigenousness, has come into being will become clearer once we consider the geography, demography, and recent history of the continent. Following this, the chapter will describe patterns of substance use before and after global influences, analyze the human service programs and interventions in terms of localization and then argue for the glocalization of Indigenous human services in the Northern Territory (NT). Throughout much of the following material, the terms "Indigenous" and "non-Indigenous" will be used out of necessity as much of the available information and data uses this terminology. This also overcomes the concerns raised by Torres Strait Islanders, that the term 'Aboriginal Australians" excludes them as a group and so renders them invisible in discussion and analysis of Indigenous issues.

Location/Geography

Table 4.1 provides a summary overview of key aspects of Australian geography, population distribution, and demographics. Australia is an island continent with a landmass of three million square miles, which makes it comparable in dimensions to the United States of America minus Alaska (Gracey, 1998). Our nearest regional neighbors are Indonesia to the north, Melanesia to the North East and East, and Polynesia to South East.

Population Distribution and Demographics

From Table 4.1, the total population of Australia is estimated at 19 million people (Australian Bureau of Statistics, 2001). With its large landmass, that gives Australia the lowest population density in the world, with an average of just two persons per km^2. Like the Pacific Island region as a whole therefore, the population of Australia is small but the region it occupies is very large (Marsella & Liu, 2001). Despite this vast region however, approximately 85 percent of Australia's general population is concentrated in coastal and urban areas. A broadly similar, coastal/urban

Table 4.1. Australia and the Northern Territory at a glance

Australia	Northern Territory
19 million people, 400,000 Indigenous (2%)	1% of Australian population (194,2000 in 1999), 28.5% of population are Indigenous (48,700)
60,000 years Indigenous settlement, 212 European & other	60,000 years Indigenous settlement, first contact European explorers on north coast 1840s, central Australia 1860's & Western Deserts 1960s
6th largest land mass in the world (almost same as USA excluding Alaska). Diverse climate and geography	1/6th of Australian continent (twice as big as Texas), from desert in the south to tropical monsoon in the north
Lowest population density among developed countries—2 persons per km^2 (347 per km^2 in capital cities to 0.1 per km^2 in remote areas).	Very low population density—1 person per km^2
70% reside in metropolitan zone and of these 90% live in capital cities; 26% reside in rural zone & 3% in remote zone.	5 urban centres & only 2 with population >10,000. 35% population live outside urban centres; 70% Indigenous live in remote settings
Indigenous land ownership 14%	Indigenous land ownership almost 50%
12% population aged over 65	2% population aged over 65; 22% population aged < 15; 38% Indigenous aged <15
Average life expectancy at birth 82 years for women & 76 for men	Average life expectancy: women 84 years for women and 75 years for men
Average indigenous life expectancy at birth 62 years for women & 57 years for men	Average indigenous life expectancy at birth 62 years for women & 58 years for men
Health Expenditure 8.3% of GDP in 1997–98	
1995–96 $2,320 per person on health services for Indigenous & $2,148 for non-Indigenous	

Source: FSM National Government, Dept. of Health, Education and Social Affairs.
*Data not available or complete

distribution can be found in the demographics for Australians who identify themselves as "Indigenous." There are some 400,000 Australians who identity themselves this way, or approximately 2 percent of the general population. About three quarters of Indigenous people live in urban areas (Aboriginal and Torres Strait Islander Commission, 2001). In contrast to their non-Indigenous counterparts however, Indigenous Australians tend to live either in depressed city centers or on the margins of cities and towns, in substandard housing or in encampments (Gracey, 1998). These differences are indicative of a wide socio-economic differential between Indigenous and non-Indigenous people. In fact, across Australia, as population

density decreases, socio-economic disadvantage increases (Australian Bureau of Statistics, 1993).

Within Australia's various geographical States and Territories, the Indigenous population is mainly found in New South Wales (117,000), Queensland (113,000), Western Australia (59,000), and the Northern Territory (55,000). The latter alone is twice the size of Texas, and is particularly interesting for this project because it has by far the highest proportion of people (28.5 percent) identifying themselves as Indigenous and a high proportion who speak Indigenous language. All other States and Territories report Indigenous populations of just three percent or less (Australian Bureau of Statistics, 2001). Relatively speaking therefore, Northern Territory society is probably more "glocal," in terms of cultural and counter-cultural influences, than any other State or Territory across the continent as a whole.

The NT also has the highest proportion of young people aged 0–14 years, which according to the Australian Bureau of Statistics is attributed to the size of its Indigenous population. Indigenous people as a whole tend to be younger than their "non-Indigenous" counterparts, with a median age of 20 (versus 40) and a life expectancy almost 20 years less than the rest of Australia (57 years for males, 62 years for females).

Finally, the NT has a relatively large proportion (close to 70%) of Indigenous people living in rural and remote areas. This does not however prevent the outside (global) world from reaching in to local communities: "Our young people, even in the remotest outstations . . . are wired into global culture through television, video, magazines and in the future, videoconferencing and other new media (Pearson, 1999, p. 41; for a fuller discussion about social influences of the global media, see Marsella, 1998).

Current (Federal and Territory) Government and Economy

The government of Australia is a constitutional monarchy. Under this Constitution, Federal elections are held every four years and State and Territory elections are held every three or four years according to the jurisdiction. The government in office federally at the time of writing is "Liberal." In Australia, this means politically to the Right rather than to the Left. The Liberal Federal government of John Howard does not have a strong international reputation on reconciliation with Indigenous peoples. As has been widely reported in the international media for example, it has consistently refused to apologize for the colonial oppression that has taken place historically on the continent (see below on the history of the "Stolen Generations").

Before the establishment of self-government in 1970, the NT was administered from Canberra. Under self-government as a territory, the NT does not have the status of a State of the Australian federation. The Commonwealth government retains the power to make laws for the NT and can override laws of the NT Legislative Assembly. The Land Rights Act is a Commonwealth law that applies only in the NT (Northern Land Council, 2001). In its 22 years of self-government, the NT has been Liberal, and the Country Liberal Party continues to remain the democratically elected governing party.

The economy of the NT, like the rest of Australia, is founded on mineral wealth, agriculture, and tourism (http://www.nt.gov.au). In the financial year 2000–2001 the NT government budget papers estimated net receipts would be $2,964m and net outlays at $2,957m (NT Treasury, 2000). The NT is heavily dependent on Commonwealth government financial support. It was predicted that the NT would generate $434m, which is 21.6% of the total revenue of $2,009m. The remaining 78.4% of revenue ($1,575m) would be provided by Commonwealth government grants. The net debt was estimated to increase by $121m in 1999–2000, taking the calculated overall gross debt in 2001 to $2.111 billion, over the capped level of $2b. Current expenditure ($1,803m) and capital expenditure ($251) brought the total estimated expenditure to $2,054m. A breakdown of current expenditure by function in 2000–2001 indicates education and health were the leading areas of expenditure. In all, 50% of the budget was predicted to be spent on education, health and law and order.

Historical Chronology

The current state of widespread unemployment among Indigenous people in Australian is in marked contrast to the economic activities between Indigenous peoples and Indonesians (Maccassarese) prior to the start of colonization (Trudgen, 2001). Throughout North Australia, traditional economies were vibrant and marked by a value on trade and reciprocity (Ivory, 1999; Pearson, 1999). The oral traditions of Indigenous cultures mean that much of their history has been or will be lost. Nonetheless, stone artifacts, including pounding tools found in the NT, indicate that Indigenous peoples may have been present in what is now called Australia for 116,000 years (Gracey, 1998). This recent discovery pushes back the chronology considerably from the previous estimate of 40,000 years. Evidence from that time onwards indicates that Indigenous peoples had very successfully adapted, as hunter-gatherers, to extremely hostile and sparse environments. The same evidence also indicates that there was

in place a very detailed system of boundaries between groups and clans (Peterson, 1976).

> *But the Wet season came and went and the Macassans did not come. The people wondered why. As they talked to each other along the coast, suggestions were made that it had something to do with the Balanda, but no-one was sure what. There were stories that some Macassan captains had said in the previous years they might not be able to come in the future because the Balanda out of Port Darwin would not let them land (some Yolŋu elders today remember their fathers in tears of disbelief when the Macassan captains told them this news). But many Yolŋu dismissed these stories. They said, "Who are these Balanda? They have no say in the legal agreements between our clans and the Macassans." No-one knew that in 1906 the South Australian government had revoked the licenses for the Macassans to fish for trepang.* (Trudgen, 2001, pp. 27)

In 1788 however, the British First Fleet arrived in what is now New South Wales. Estimates of the Indigenous population at that time range from 300,000 to one million, yet despite this the British declared the land they had "discovered" 'Terra Nullius,' or Empty Land (Dudgeon & Pickett, 2000). Throughout the nineteenth century, this first wave of globalization did indeed attempt to empty the land of its Indigenous peoples, whether through massacres, or through the "gifts" of poisoned flour and disease-infested blankets (Wessells & Bretherton, 2000). Indigenous peoples' description of the activities of Europeans in Australia equate with an ethnic war (Worchel, 1999). In such wars, the usual gains in national and religious conflicts, namely territory, political power, or conversion, have less currency and importance. As Worchel points out in his analysis of inter-ethnic conflict, the victors may capture territory or change some of the beliefs of the conquered, but they will not eradicate their ethnicity. "Victory" in an ethnic war results only when every member of the opposing ethnic group has been destroyed. In the Australian context, the massacres, extinction of entire tribes and clans, the almost complete ethnic cleansing in Tasmania, rape and degradation of women and young girls, and the slaughtering of the old and very young with frightening savagery (see Trudgen, 2001), match the description of attempted *genocide* (Worchel, 1999).

> *For thousands of years the clans had respected each other's estates. So when these Yolŋu saw the white man's animals eating their grass, they saw the animals as theirs. They started killing some of the cattle to feed their clan. When the white pastoralists found remains of cattle in some Yolŋu villages, they were very*

> *angry . . . The pastoralists came with one of their wagons, offering horsemeat to many of the clans. The clan leaders were overjoyed, assuming that at last the Balanda had recognized the lawful relationship that should exist between them as strangers and the estate owners . . . As they (the pastoralists) left the people started preparing the ground ovens . . . looking forward to the feast. That evening they ate, thanking the pastoralists for their good gifts. It was only when some of the people became violently ill that the Yolŋu realized the Balanda had tricked them with some strange sorcery . . . As women and children writhed in agony, the leaders screamed in disbelief. How could any human being kill women and children in such a cowardly way? Have these white men no sense of law? To this day, many Yolŋu in north-central Arnhem Land will not eat horsemeat.* (Trudgen, 2001, pp. 19)

By the early 20th century, the remaining survivors of this global pressure had been or were being coerced onto mission stations and reservations (the forerunners of today's Indigenous communities), or pressed into "domestic servants" for the new Australian gentry (Riley, 1998). This latter event in particular marks the beginning of the "Stolen Generations," when children with some "White blood" were removed from their Indigenous family members and placed into the care of White institutions and foster families. It is estimated that between one in three and one in 10 Indigenous children were forcibly removed from their families in this way (Human Rights and Equal Opportunity Commission, 1997). By 1950, after at least four decades of this practice, the "Indigenous" population had bottomed out at 50,000 (Dudgeon & Pickett, 2000).

A first tangible step out of this moral and social mire took place in 1966, when Australia signed the International Convention on the Elimination of all Forms of Racial Discrimination. Shortly afterwards, in 1967, Australia held a national referendum on citizenship, which overwhelmingly gave the right to vote (as well as to consume alcohol) to Indigenous peoples. In 1975, the Federal government in Canberra passed the Racial Discrimination Act. In 1991, a Royal Commission into Aboriginal Deaths in Custody Report was published (Williams, 2000). The same year witnessed the formation of the Council for Aboriginal Reconciliation (Gomersall, Davidson, & Ho, 2000). In the following year, the High Court of Australia overturned Terra Nullius, in favor of a land claim by Eddie Mabo (Mabo and others vs. the State of Queensland, 1992). This decision was consolidated when the Wik people won their claim for the land that they had occupied continuously since Terra Nullius (Wik peoples vs. State of Queensland, 1996).

1996 also saw the start of a formal inquiry into the social and psychological consequences of the Stolen Generations (Williams, 2000). By the

time of the new millennium, the Indigenous population had risen from 50,000 to 400,000, and there have recently been claims of "cultural renaissance," and to that extent recovery, for Indigenous peoples (see Marsella & Liu, 2001, p. 3). Yet the pain of the Stolen Generations remains a hugely significant blight on relations between Indigenous and 'non'-Indigenous in Australia today (Dudgeon & Pickett, 2000, p. 83).

Examples of the deleterious consequences of this social canker, on Indigenous health and welfare, are not hard to find. In the NT for instance, a clinical neuro-psychologist in private practice reported that over 90 percent of his clients for alcohol-related problems reported having been stolen from their Indigenous families as children (Summers, 2000, cited in Carr, O'Reilly, & Bolitho, 2000). According to Clark (2000), many of these stolen generations have found themselves isolated from their Indigenous kinfolk, which has seriously hampered the development of their sense of identity. As well, these people have not been seen as genuinely "Aboriginal" or "Indigenous," even from within the so-called "mainstream." This implies they have not been accepted within those sectors of society either. Thus, the Stolen Generations are difficult to classify as either "Indigenous" or "non-Indigenous." From many points of view, including the provision of human services, they remain a special population with their own special individual and group needs.

CULTURE

Traditional Culture

Coupling this consideration of the Stolen Generations with our earlier emphasis on diversity within the Indigenous nations, and before that glocalisation, it is inherently difficult and risky to attempt to characterize "Indigenous" cultures. Nonetheless, it has been suggested that the ethnography of drinking behavior in some Indigenous groups reflects the influence of core cultural values (Rowse, 1993). These have their origins in cultural ecology (Berry, 1979). According to Berry's perspective, (a) the harsh climate and terrain of much of Australia, coupled with (b) non-sedentary hunter gathering, would have encouraged, through evolution, a combination of both (a) collectivistic and (b) individualistic values. In the NT, Rowse has evoked these concepts in an analysis of present-day drinking behavior. Specifically, it is suggested that the ethnography of drinking behavior in some Indigenous groups reflects by turns each of the two basic value orientations. Town Camps for instance are temporary settlements on the fringes of urban areas, where both collectivism and individualism interact with the

ready availability of alcohol to reinforce collective drinking and individual choice to drink to excess. In more remote and localized contexts however, these same values work in the opposite direction, encouraging collective abstention and the individual right to abstain. Thus, whilst traditional cultural values may actually co-vary with drinking behaviour, they do not appear to do so in any simple, linear way. Their dynamics are inherently complex, and reflect the interpenetration of local and global factors.

A revealing and insightful analysis of this interpenetration is provided in Pearson (1999), in the context of Far North Queensland, at Cape York. According to Pearson, "a cancer has afflicted the obligation to share resources in the old days, which today is manifested in an obligation to share the Family Allowance Support payment to get drunk with one's relatives—whilst our children go without" (1999, p. 17). This is an inherently glocal perspective, in which globalization is seen to corrupt local values that were previously highly adaptive. But Pearson sees the solution to such challenges in glocalization itself, specifically in rejecting overly localized views: "Because they are seen as 'traditional' and traditional society was successful, the maintenance of these 'traditional' elements is seen as a good and desirable thing" (1999, p. 16). And, "This is not a matter of blame: People are caught in an economic and social system which precipitated this misery. *But it is a matter of responsibility*. There has to come a time when our people as individuals need to face our responsibility for the state of our society—for respect and upholding our true values and relationships. Indeed our laws and customs" (1999, p. 20); for a similar point in regard to the NT, see Langton, 1991).

In the same way that cultural values are enduring, so too are normative communication styles. In his analysis of communication styles, which focused on groups in the NT, Walsh (1997) describes a range of differences between non-Indigenous and Indigenous communication styles, which he believes are relatively widespread across the Territory as a whole. Walsh describes how many Indigenous Territorians in remote and urban fringe communities alike prefer to communicate in modes that are "communal" (rather than "dyadic") and "continuous" (rather than "contained). Communal (versus dyadic) mode means that conversations are like a radio program. They are 'broadcast' to nobody in particular in the group at the time. Conversation is carried out without being addressed, either verbally or in terms of eye contact, to any particular person in the group. Continuous (versus contained) mode means that this conversation is also not packaged into discrete time units. Thus, the answer to a question may come two weeks after it was asked, in a completely (to the non-accustomed) unrelated social context. In offering an explanation for this difference, Walsh uses cultural ecology again. He suggests that for people who have for eons

lived largely outdoors and within full view of each other, being able to 'tune out' of and 'tune in' to discourse, as well as to discuss it later at a time of one's own choosing, has provided a tolerable level of individual autonomy over the social environment.

The key point for us in considering these norms, however, is that the provision of human services, and the reliable and valid research assessment of needs on which those services will build, depends upon successful communication. To the extent that most research is conventionally dyadic and contained, for example in interview and questionnaire studies, it may be relatively inappropriate in relatively remote and isolated cultural and community settings. Indeed, the whole idea of discrete question-and-answer sessions may have to be substantially revised in such settings. In particular, researchers would need to design an appropriate hybrid, or suitably glocalized research methodology (for some innovative examples, see Watson, Fleming, & Alexander, 1991). Such research methods would be able to respect the need for standardized (global or regional) data-gathering tools, as well as respecting the enduring local norms of the community in which the research was being conducted.

Social Changes and Forces

A predominant form of change for many contemporary Indigenous groups and societies is urban migration (Marsella, 1995; Marsella, Wandersman, & Cantor, 1998). The last 30 years in particular has seen many changes in the distribution of Australia's self-identifying Indigenous groups (Aboriginal and Torres Strait Islander Commission, 2001). In 1966 for instance, more than 50 percent of these Indigenous peoples lived away from the most heavily populated States and Territories (New South Wales, Victoria, and the Australian Capital Territory). The NT, for instance, was home to 26 percent of the total Indigenous population of Australia. By 1996 however, this figure of over one in four had shrunk to 13 percent. During the same period, 1966–1999, the proportion of Indigenous people living in the Australian Capital Territory (the capital city of Canberra and its surrounds) remained stable, but in Victoria and New South Wales (the two most urbanized and industrialized States in the nation) substantial increases in the populations of Indigenous peoples were recorded.

Cultural Dislocation and Disintegration

The urban migration described above has undoubtedly placed pressure on the wide variety of Indigenous cultures found across Australia generally. This pressure naturally raises the question of whether urban

migration is contributing towards alcohol use and abuse among Indigenous groups. Whilst data for urban-assimilated Indigenous people is not available, there is data on the pattern for urban fringe dwellers (Gracey, 1998). We have already seen that alcohol consumption can be reduced in Indigenous communities when they become more cohesive (Living With Alcohol, 1999). Logically perhaps, this would imply that the opposite happens whenever the community becomes less cohesive, as perhaps in large urban centers. Instead however, the limited available data from urban Indigenous samples *replicates* a basic pattern found in rural and remote areas. In both types of setting that is, Indigenous people are more often abstainers from alcohol than their non-Indigenous counterparts; although when they do consume alcohol it is consumed in significantly larger amounts (Gracey, 1998). To put this in another way, high and low patterns of alcohol consumption do not fall neatly across the urban-rural distinction. Thus, the available empirical evidence suggests that cultural dislocation, in the form of urban migration, is not in itself sufficient to change patterns of alcohol consumption.

A second form of dislocation is loss of traditional lands, and, alternatively, their restoration. We have seen that a process of land restoration was started in 1992 (with Mabo) and consolidated in 1996 (with the Wik decision), but "While the rights of Aboriginal people to land have been legally recognized, the actuality is that very few claims for Native Title have succeeded" (Wessells & Bretherton, 2000, p. 103). Nationally then, there is not yet really any available evidence that relocation, in the sense of reallocation of land stewardship, has had any impact on Indigenous health. In the NT however, many traditional groups *do*, already, own land. About 42 percent of the Territory is indigenously owned, whilst a further 10 percent is under claim, under the Aboriginal Land Rights Act 1976 (Ivory, 1999). Yet many of these land-owning Indigenous societies, which have never been dispossessed, still have among the highest rates of abuse (Brady, 1991; see also, Watson et al., 1991, p. 63). To put this another way, if we were to take a range of communities that have versus do not have high alcohol consumption, this would not fall neatly across the dispossessed-possessing land divide. The same applied to petrol sniffing (probably, after alcohol, the second most serious cause of concern to Indigenous communities), which is prevalent in some of the most traditional communities on Indigenous owned land, yet is often absent in those (relatively dispossessed) communities with a long association with pastoral industry.

Whilst the available evidence does not establish any direct link between cultural dislocation and the consumption of alcohol and other drugs, we must still be very careful about extrapolating any firm conclusions from the available evidence. For example, as Ivory points out, land-owning

Indigenous Northern Territorians are both "land-rich [and] money-poor" (p. 64, parenthesis added). This apparent paradox arises because their land is communally owned under inalienable freehold, and so cannot be put up as collateral to secure bank loans to start local businesses. This perspective on cultural (re)location is very glocal. The ability of land and location to influence health and welfare is intimately tied to its capacity to assist local communities to engage with the global economy. Thus, it is probably too simplistic to argue that dispossession and cultural breakdown are the sole causes of substance misuse. As is found with substance use in youth and adults generally, there are no single predictors for problematic use, and some of these may be glocal in origin.

> "It would appear that the ill health and other problems of the Aboriginal people are symptoms of an underlying state of social and spiritual disintegration. Improvement in health can come only from an approach based on this underlying cause and not simply from the provision of better health services." (National Seminar on Aboriginal Health Services, 1972, cited in Cowen, 1973, p. v).

The question of cultural disintegration is far more difficult to address than cultural dislocation. Firstly, and given the recent historical and demographical developments reviewed above, Indigenous spokespersons themselves are saying that Indigenous Australia is witnessing a "cultural *renaissance*" (Dudgeon & Pickett, 2000, p. 83, emphasis added). This means that there is a question about whether cultural "disintegration" is happening at all. If the renaissance hypothesis is correct, and given that alcohol and other drugs remain of concern to Indigenous communities, this would imply that the kind of concern voiced in the above quotation is misplaced onto cultural disintegration. The main problem however is that we do not yet have the minimum data, in Australia, to even deliberate about whether cultural disintegration is or is not happening, and therefore to decide with any confidence whether it is or is not impacting significantly on the consumption of alcohol and petrol—which we do know are happening.

INDIGENOUS HEALTH AND WELL-BEING IN AUSTRALIA

The following sections will describe the Australian health care system, Indigenous health prior to European invasion, and the resulting global influences, and the ensuing health status of Indigenous Australians. Statistical information on Indigenous people is very limited before 1967 and these people were not included in census data until 1971. There still remain many gaps, deficiencies and inconsistencies in the collection of information

on Indigenous health and wellbeing, and these are discussed at the end of the paper, but one major hurdle has been overcome with the development of a standard procedure for identifying Aboriginal and Torres Strait Islander people based on self-reported Indigenous origin. More importantly, and as we saw, this standard is accepted by Indigenous people themselves.

The Australian Health and Welfare System

The Australian health system is quite complex, with an array of funding and regulatory mechanisms types and providers of services. Service providers include: Medical practitioners, other health professionals, hospitals, government agencies, and non-government agencies

The Commonwealth of Australia funds two national subsidy schemes for all Australians, Medicare and the Pharmaceutical Benefits Scheme (PBS). These subsidize payments for medical services and a high proportion of prescription medications from pharmacies (chemists). Public hospitals are jointly funded by Commonwealth and State Governments, and provide free services to patients. The combination of Medicare, the PBS, and public hospitals has been a central feature of the health care system in Australia for the last 25 years. Thus, the Australian health care system is designed to provide adequate health care at little or no cost to all Australians.

Often the first point of contact to the health care system is via general medical practitioner, who will either provide a service directly or refers the person for specialist care from other health professionals, hospitals or community-based healthcare organizations.

Many community-based organizations can be approached directly, and they provide services such as mental health, family planning, and other specialized care and treatment. These organizations are usually funded through Medicare, or other government programs. Private hospitals, dentists, and other private sector health professionals, are available, and patients/consumers pay for the services provided.

Varieties of mechanisms are in place to ensure regulation of the health care system. State and Territory governments license private hospitals, and medical and other health professionals are registered to practice in each State and Territory. The Commonwealth regulates the private health insurance industry, and oversees the safety and quality of pharmaceutical and therapeutic goods and equipment. Medical and other health professional associations set professional standards and clinical guidelines, while universities and hospitals provide accredited training of undergraduate and postgraduate health professionals.

The Commonwealth, State, Territory, and local governments, deliver public health, community, and ambulance services. Public health services include environmental monitoring and control, ensuring food quality, disease screening programs, immunization services, communicable disease control and public health education campaigns. A number of organizations and groups support to the health care system through the provision of research and statistical information, public discussion, policy development, fund raising for research, provision, and coordination of voluntary care and education and health promotion. Many government and non-government organizations also play a role in health, even though they are generally not viewed as part of the health care system.

In 1997–98, the total expenditure on health services by both government and non-government sectors in Australia was $47,030 million (in current prices), amounting to 8.7% of the gross domestic product (GDP) (Australian Institute of Health and Welfare, 2000). This proportion of GDP was similar to other developed countries with the exception of the USA, which had a higher ratio (14%). Two thirds (68.6%) of 1997–98 health expenditure funding was provided by governments and, of this, the Commonwealth supplied 45.2% and the State and local governments 23.4%. In the same year, the average rate per person expenditure was $2,523 (in constant 1997–98 price terms), and there has been significant real growth in expenditure on health services in recent years (Australian Institute of Health & Welfare, 2000). A 1995–96 comparison of health expenditure on Indigenous versus non-Indigenous Australians indicated that spending per Indigenous person was 8% higher than for other Australians ($2,320 : $2,148).

Indigenous Socio-Economic Status

Demographic factors and socioeconomic well-being have the potential to determine health status (Strong, Trickett, Trulare & Bhatia, 1998). Indigenous Australians continue to experience poorer health than the general Australian population (Australian Institute of Health and Welfare, 2000).

Indigenous groups have found some place in the economy of Australia, but generally speaking the picture on employment is relatively dismal. Across Australia as a whole, 62 percent of the population participate in the paid labor force (Condon, Warman, & Arnold, 2001), but amongst the Indigenous population this figure drops to 53 percent, where the unemployment rate is 23 percent, or double the national average (Australian Bureau of Statistics, 2001). Indigenous people in the NT continue to experience inequalities in socioeconomic factors that contribute to health and wellbeing. Only 40% of Indigenous Territorians are in the labour

force, compared to 75% of other Territorians. This 40% includes those on Community Development and Employment Program (CDEP) schemes, which are equivalent to relatively low-paid Work for the Dole schemes. This low level of participation translates into low levels of income, with approximately 65% of Indigenous Territorians receiving less than $200 per week. This is in marked contrast to the national figure of 35% at this low level of income (Condon, Warman & Arnold, 2001). Poor educational outcomes suggest that employment and income opportunities for Indigenous people may not improve, and it is predicted that the level of unemployment for Indigenous Australians will reach 53% by 2006 (Taylor & Roach, 1998).

It is against this backdrop that, across North Australia, there have been calls by Indigenous groups and leaders to find ways of reducing dependency on welfare, which is increasingly seen as psychological demoralizing and, by implication, contributory towards alcohol consumption and related issues of concern to Indigenous communities across the region (Pearson, 1999).

Indigenous Health Before European Invasion

A body of evidence suggests that Indigenous Australians were relatively healthy before first contact with European colonizers in 1788 (Palmer & Short, 2000). Traditional Indigenous life ensured access to land and resources to provide a good diet and active lifestyle. The mobile hunter-gathering way of life assisted with the prevention of the spread of infectious diseases. Descriptions by early explorers suggest the Indigenous people in what is now the NT were strong, muscular, healthy, and fit (Condon et al., 2001). Malnutrition was reported to be unknown.

Following first contact with European globalization, there was rapid transmission of infectious diseases such as smallpox, measles, whooping cough, tuberculosis, leprosy, and venereal disease, resulting in a great loss of life as Indigenous people had no resistance to such infections (Condon et al., 2001). Systems of medicine were available to treat many common illnesses and infections, but there were virtually no health services available to treat those new infections. Compounding the lack of resistance was reduced access to water and bush foods, as settlers gradually took control of the land. Indigenous people were forced to move to settlements or missions, and the practice of issuing food meant many people abandoned the hunter-gathering way of life.

The new sedentary lifestyle, poor diet, overcrowding, poor hygiene, and sanitation, exacerbated the spread of disease, and in some settlements epidemics occurred in measles, whooping cough, mumps, chickenpox, and influenza (Kettle, 1991). Very little health care was available in these settlements, and the result was a high level of disease and death, particularly

among children. The major killers of these children were gastrointestinal and respiratory tract infections.

Health Status of Indigenous Australians

A range of health status measures indicate Indigenous Australians continue to experience much poor health than the general Australian population (Australian Institute of Health and Welfare, 2000). Health disadvantage commences at an early age and continues throughout the life span, reflecting the broad socio-economic disadvantage experienced by Indigenous people. In the period 1991–96, Indigenous life expectancy at birth was 56.9 years for males and 61.7 years for females. This is lower than the all-Australian estimates of 75.2 years for males and 81.1 years for females. Data from the NT, South Australia, and Western Australia indicate the death rate to be about three times higher than the age-specific death rates for the Australian population. The death rate was higher for every age group, and the greatest difference was in the 35 to 54 years age bracket. The major causes of death, cardiovascular diseases, cancer, respiratory diseases, endocrine diseases, and injury, accounted for three quarters of all deaths. The major causes of death are the same as for the Australian population, although deaths from these causes occurred at a greater rate among Indigenous people.

There have been reductions in both infant and maternal mortality of Indigenous Australians in the last 30 years. However, low-birth weight babies, stillbirths, and neonatal deaths, occur twice as often in births to Indigenous mothers (Australian Institute of Health and Welfare, 2000). Infant death rates are 3.1 times higher in Indigenous males, and 3.5 times higher in Indigenous females (Cunningham & Paradies, 2000).

The Northern Territory

While the health of non-Indigenous Territorians is not dissimilar from that of the rest of Australia, the health status of Indigenous people in the NT, like the rest of Australia, is much lower (Condon, et al., 2001). The Territory Indigenous death rate is three times higher than the Australian rate and life expectancy is about 20 years less than of other Australians (Dempsey & Condon, 1999). Premature adult death, rather than excess infant death, accounts for most of the reduced life expectancy of Indigenous Territorians. As we have seen, both Indigenous and non-Indigenous populations are young in the NT when compared to the rest of Australia, with the Indigenous group being particularly young (Condon et al., 2001). This results from the combined effect of very high fertility and mortality rates

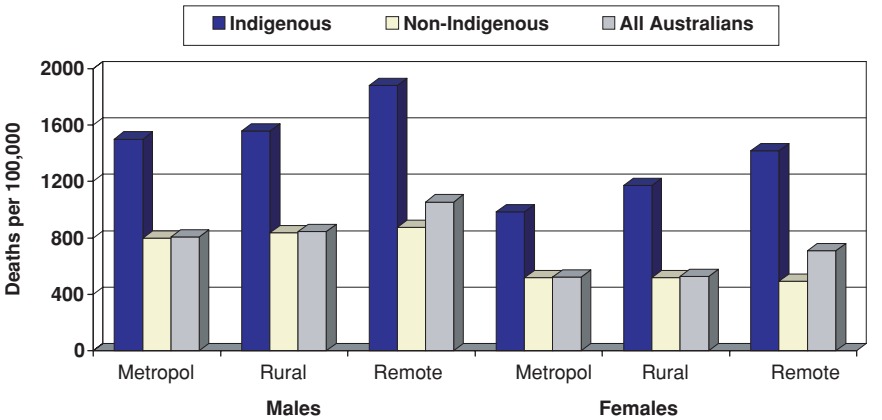

Figure 4.1. Total death rate of Indigenous & non-Indigenous Australians by region, 1992–96.
1. Based on data for South Australia, Western Australia and Northern Territory
2. Age standardized to the Australian population 1991
Source: Strong, Trickett, Trulaer, & Bhatia, 1998.

and much lower life expectancy, with 58% of Indigenous people dying before the age of 55 compared to 17% of non-Indigenous Territorians.

Australia's Indigenous population comprises 2% of the total population and only 1% of the metropolitan zone and 3% of the rural zone. However, this proportion increases to 13% in remote centres and 26% of other remote areas (Australian Bureau of Statistics, 1998). The Socio-Economic Indexes for Areas (Australian Bureau of Statistics, 1993) indicate a general increase in disadvantage as population density decreases. Mortality figures indicate an increasing Indigenous death rate with increasing remoteness, with both male and female rates double that of the non-Indigenous population (Figure 4.1).

Injuries, Violence, and Suicide

Indigenous mortality from injury is higher than for the non-Indigenous population, and Indigenous people have a higher death rate from homicide (Anderson, Bhatia & Cunningham, 1996). The homicide rate in remote areas is six to seven times higher than in the metropolitan zone, and this is largely due to greater levels of interpersonal violence in Indigenous communities. Indigenous people are eight times more likely to murdered and 45 times more likely to be victims of domestic violence (Memmot, 2001). From 1989 to 1996, it was estimated about 20% of victims and 22% of offenders in intimate-partner homicides were Indigenous (Carach & James, 1998).

In 1995–97, combined data from the NT, South Australia, and Western Australian indicated deaths from intentional injury were more common for Indigenous people than for other Australians. There were seven times as many deaths among Indigenous females, and close to eight times as many among Indigenous males than would have been expected if the all-Australian rates applied (Cunningham & Paradies, 2000). Between 1979 and 1995, injury was the second most common cause of death in Indigenous males (19%), and the fourth most common cause in Indigenous females (10%). Injury deaths from 1981 to 1995 were excessive in the NT, particularly for Indigenous people (Condon et al., 2001). The death rate for non-Indigenous children in the Territory was three times higher than for other Australian children, while that for Indigenous children was 45% higher than for non-Indigenous children in the NT (d'Espaignet, Kennedy, Patterson & Measey, 1998).

The age standardized admission rate for injury is higher in Indigenous people in the NT than for other Territorians (Condon et al., 2001). The rate for Indigenous males is 6,337 per 100,000 compared to 2,690 per 100,000 in non-Indigenous males. Both are higher than the Australian rate for 2,329 per 100,000. For Indigenous females in the NT, the rate is 5,283 per 100,000, and this is higher than for non-Indigenous females in the NT (5,283), Indigenous females throughout Australia (4,096), and all Australian women (1,578). The leading cause of injury deaths for Territorians (both male and female, Indigenous, and non-Indigenous) was road transport accidents. The next leading cause of injury deaths for Indigenous people was homicide, and the rate was higher in Indigenous males and females when compared to their non-Indigenous counterparts (19.4 : 7.5 and 33.6 : 7.7, respectively, for males and females).

Domestic and family violence are the leading cause of admissions of Indigenous women to hospital in the NT (Markey, 1998). In 1997, women comprised half of all injury admissions, and 95% of these women were Indigenous. From 1992 to 1997, Indigenous women constituted 47% of all patients admitted to hospital for intentional injuries inflicted by another person, and two thirds of these women were aged between 25 and 49 years.

In the period 1995–97 young Indigenous males had a death rate 2.8 times higher than other young males, while that for young Indigenous females was twice that of their non-Indigenous counterparts. The rate for young Indigenous males was quadruple that for the females, and this differential was higher than that of the young population (Moon, Meyer & Grau, 1999).

Injury was the leading cause of death for all young people aged 15 to 24 years, but the injury death rate was 2.3 times higher for both Indigenous males (2.3 times) and females (1.6 times). Hospitalization rates for

Table 4.2. Selected reasons for hospitalization of Indigenous and Non-Indigenous young people (aged 15–24), 1997–98

	Males					Females				
	Indigenous		Non-Indigenous			Indigenous		Non-Indigenous		
Diagnosis	No	Rate/ 100,000	No	Rate/ 100,000	Rate Ratio	No	Rate/ 100,000	No	Rate/ 100,000	Rate Ratio
Mental	529	1,378	16,592	1,256	1.1	466	1,220	17,431	1,378	0.9
Respiratory	266	693	10,498	795	0.9	324	848	14,010	1,108	0.8
Obstetric	..	..	..	..	..	5,846	15,304	106,709	8,437	1.8
Violence	353	920	4,542	344	2.7	366	958	807	64	15.0
All injuries	1,406	3,663	45,845	3,470	1.1	944	2,471	17,915	1,417	1.7
All causes	4,449	11,591	171,174	12,955	0.9	10,767	28,186	283,429	22,411	1.3

Source: Moon, Meyer & Grau, 1999.

Indigenous youth confirm this greater prevalence of both of injury and violence (Table 4.2).

Suicide rates are higher in Australia than in the many other European nations from which the major migrant groups are drawn, but similar to New Zealand, Canada, and the USA (Cantor, Neulinger & De Leo, 1999). The rates are much higher in men, with 81% of suicides in 1996 being male. There were 436 Indigenous suicides registered in Western Australian, South Australia and the Northern Territory from 1988 to 1998 (Table 4.3)

Table 4.3. Number of Indigenous suicides in Western Australia, South Australia and Northern Territory, 1988–1998.

	Counts and Rates[a]					
Year	SA	WA	NT	Total	Crude rate	Standard rate[b]
1988	5	7	5	17	n.a.	n.a.
1989	12	8	0	20	n.a.	n.a.
1990	8	6	2	16	n.a.	n.a.
1991	8	4	1	13	11.1	9.4
1992	7	5	7	19	15.8	17.6
1993	2	9	2	13	10.6	9.8
1994	8	9	5	22	17.6	18.7
1995	9	10	2	21	16.5	16.3
1996	1	12	8	21	16.1	17.4
1997	6	9	11	26	19.6	18.7
1998	9	20	10	39	28.9	26.3

[a] Based on Indigenous population estimates for WA, SA and NT. Rates are for 100,000 persons

[b] Age standardized rate adjusted by direct standardization taking the 1991 Australian population as the standard

Source: Steenkamp & Harrison, 2000.

and this number represented 21% of all registered deaths from injury and poisoning (Steenkamp & Harrison, 2000). The comparable proportion for non-Indigenous people was 20%. These figures need to be considered with a degree of caution as the increase visible in Table 4.3 may reflect, partially at least, a better ascertainment of Indigenous status over time.

Indigenous suicide tends to be sharply concentrated in the younger age groups, especially males and rates were significantly higher in Indigenous people in the 15–19, 20–24 and 25–29 age brackets (Steenkamp & Harrison, 2000). Hanging is the most common method utilized for both Indigenous males and females. Other less common methods were firearms (males) and poisoning by solid or liquid substances (females).

A Western Australian study of suicides in the age range of 15–24 for years 1968 to 1990 (Beresford, 1993) indicated Indigenous youth were overrepresented at almost three times their representation in the general population (10.4% : 3.6% of deaths by suicide). A more recent Victorian survey reported the rate for Indigenous males aged 15–19 years was 1.4 times higher than that for their non-Indigenous counterparts, and higher still among rural males (Suicide Prevention Task Force, 1997).

Intentional self-harm is a major social problem in many Indigenous communities in Australia, and is becoming an unprecedented problem in traditional Indigenous communities in the NT (Reser, 2000). From 1991 to 1995, the suicide rate for non-Indigenous males was higher in the NT than in the rest of Australia, while that of non-Indigenous females was similar to the Australian female rate (Dempsey & Condon, 1999). During the same period, suicide was uncommon among Indigenous Territorians (Table 4.4). However, the suicide rate for Indigenous males more than doubled from 1986 to 1995 and the first suicides of Indigenous females were also recorded (Table 4.5). Suicide in traditionally oriented Indigenous communities was

Table 4.4. Number of suicides by Indigenous status in the Northern Territory, 1981–95

	Indigenous	Non-Indigenous	Total
Male			
1981–85	6	52	58
1986–90	5	88	93
1991–95	15	72	87
Total	30	231	261
Female			
1981–85	0	0	3
1986–90	0	11	11
1991–95	3	10	13
Total	3	31	34

Table 4.5. Number of suicides by Indigenous status in the Northern Territory, 1994–97

	Indigenous	Non-Indigenous	Total
Male			
1994	5	13	18
1995	3	19	22
1996	7	21	28
1997	9	24	33
Total	24	77	101
Female			
1994	0	1	1
1995	0	1	1
1996	1	6	7
1997	2	3	5
Total	3	11	14

almost unknown until the late 1980s (Graham, Reser, Scuderi, Zubrick, Smith & Turley, 2000), but is becoming a serious problem amongst young people in the NT generally, and particularly so in regions as remote as Arnhem Land and the Kimberley.

Intentional self-harm was the principle diagnosis for 645 hospital admissions in the NT between 1993 and 1997 (Condon et al., 2001). Of these admissions, 36% were Indigenous people, and this is a higher rate than predicted from their 28% representation in the NT population. Just over one third of the Indigenous admissions for intentional self-harm were diagnosed with a substance use disorder (dependence or misuse disorder), compared to 22% of non-Indigenous admissions.

INDIGENOUS LICIT AND ILLICIT SUBSTANCE USE

This section will attempt to describe Indigenous substance use prior to European colonization, and the ensuing global influences, and the current patterns of substance use. Indigenous Australians did not have a written language, therefore establishing patterns before the late 20th Century is very difficult. Additionally, statistical information on Indigenous substance use is also very limited and the many gaps and deficiencies result in a somewhat patchy picture.

Substance Use Prior to European Settlement

Prior to European colonization Indigenous people used strong bush tobaccos (*Nicotiana* species), the psychoactive *pituri* (macerated leaves of

Duboisia hopwoodii), intoxicating beverages from cider tree sap (*Eucalyptus gunii*) in Tasmania, fermented bauhinia blossom & wild honey in north Australia and the soaked cones of *Xanthorrhea* (blackboys, grass trees) in southeast Western Australia and corkscrew palm in north Australia (Brady, 1998; Gray & Sputore, 1998; Watson, 1991). Stupefying drinks were made from corkwood trees in New South Wales and the root and bark of ming (*Santalam* species) in Victoria.

Kava, powder from the roots and lower stem of *Piper methysticum*, was drunk in the Torres Strait at the turn of the 20th century. Licit and illicit substances have been introduced to Indigenous Australians through contact with the nearest regional neighbors, Indonesia, Melanesia, and Polynesia. The major influence on substance use however has come from outside of this region. Whilst various types and forms of alcohol were consumed traditionally by a number of Indigenous groups, the first examples of alcohol misuse, without doubt the primary concern within Indigenous groups today, are generally attributed to the global influence of exposure to non-Indigenous drinking styles among colonists and migrants from Western Europe (McDonald, 2000).

Licit Substance Use in Indigenous Australians

The NT Social Welfare Ordinance was passed in 1964 and the amendments to the Licensing Ordinance provided Indigenous peoples in the NT the same rights with respect to alcohol as other Australians (d'Abbs, 1987). The reality for those on Indigenous reserves or mission leases (the forerunners of today's Indigenous communities) was continued government control through the Licensing Ordinance which prevented alcohol being brought into a reserve or mission without approval of the Welfare Officer in charge. Although non-Indigenous Australians were routinely granted permits, they were rarely issued to Indigenous people.

During the next decade government policy moved from ideas of assimilation to self-determination and less control was exerted over Indigenous people. As controls were relaxed there was growing concern about the effects of alcohol use. The 1973 the Department of the Northern Territory established a Board of Inquiry to report on the sale and consumption of alcohol and it revealed widespread concern on Indigenous communities regarding alcohol-related problems and a genuine fear of the consequences of allowing unlimited amounts of liquor into communities (d'Abbs, 1987).

A submission to the 1976 Aboriginal Affairs for a House of Representatives Inquiry into *Alcohol Problems of Aborigines* noted some communities were attempting to take control of the supply and consumption of alcohol.

Community leaders negotiated with local licensees to restrict the supply at certain times and legal advice was obtained in relation to prohibition orders against those considered to be so affected by alcohol that the wellbeing of the individual and others was at risk (d'Abbs, 1987). Several communities adopted total bans ("dry communities") while others tested licensed clubs ('wet canteens') and various restricted supply methods.

Control over alcohol availability and use on communities was officially passed onto Indigenous people and institutions running the communities in 1979, when the Northern Territory Liquor Act superseded the older Liquor Ordinance. Under the new Act, all previous restrictions were revoked on January 1981 and restricted areas were communities that had successfully applied to be declared restricted by the Northern Territory Liquor Commission.

Alcohol Consumption Patterns

The 1994 National Aboriginal and Torres Strait Islander Survey (Australian Bureau of Statistics, 1994) indicated 58% of Indigenous people considered alcohol to be the main health issue, followed by drugs and diabetes. Indigenous patterns of alcohol consumption differ to that of the non-Indigenous population (Commonwealth Department of Human and Family Services, 1995). Fewer Indigenous people consume alcohol, there are more ex-drinkers and fewer regular drinkers (Tables 4.6 and 4.7).

Urban Indigenous people tend to drink less frequently than the general urban population, but when they do, they usually consume more than their non-Indigenous counterparts. The National Health and Medical Research Council safe drinking recommendations indicate higher proportions of both Indigenous males and females consume at hazardous and harmful levels. When analysis was restricted to regular drinkers (once a week or more, 33% of urban Indigenous and 45% of urban non-Indigenous, from

Table 4.6. Alcohol consumption in urban Indigenous people and the general population

Level Alcohol Use	Prop^{n} urban Indigenous population (1994 Survey)	Prop^{n} general urban (1993 survey)
Current regular (once/wk or more)	33	45
Current occasional (less once/wk)	29	27
Ex-drinker	22	9
Never more 1 glass	15	13
Don't know	1	6

Commonwealth Department of Human and Family Services, 1994

Table 4.7. Consumption frequency urban Indigenous and the general urban population*

Frequency of use	Prop^n Indigenous (1994 Survey)	Prop^n general urban population (1993 survey)
Every day	8	11
At least once a week	41	50
At least once a month	29	22
At least once a year	14	15
Less often/no longer drink	8	2

*Of those who had a drink in previous 12 months
Commonwealth Department of Human & Family Services 1994 (from Gray & Sputore, 1998).

Table 4.7) then 69% of Indigenous people compared to 12% the general urban non-Indigenous drank at harmful levels.

> *Oh, real weak on the two knee, and arm you know and I couldn't pick em up anything. Couldn't even hold the tea. No—real weak. Couldn't see from here to that motor car. Just see the country, [like] smoke. That's what happened from the grog. Yeah. I bin tell them all, you know, I can't take it my grog. I can't see too far. I can't feel my stomach, and I can't get myself clean, and I got no good bed . . .* (Claude Manbulloo, in Brady, 1998).

A 1997 NT household survey of alcohol consumption patterns indicated urban Indigenous people were less likely to drink than their non-Indigenous counterparts (48% : 39%), but higher proportions drank at hazardous and harmful levels (Table 4.8). A 1994 national survey (Australian Bureau of Statistics, 1996) revealed 42% of Indigenous males in the NT had

Table 4.8. Alcohol consumption of urban Indigenous and non-Indigenous Territorians, 1997*

	Per Cent	
Alcohol Consumption	NT Indigenous	NT non-Indigenous
None	48	39
Responsible	27	46
Hazardous	16	8
Harmful	9	7

*Note: National Health and Medical Research Council guidelines (Pols & Hawkes, 1992)
Source: Bertram & Crundall, 1997.

Table 4.9. Estimated mean annual per capita consumption of pure alcohol by Indigenous status, Northern Territory 1994–5 to 1997–98.

Region	Indigenous	Non-Indigenous
Upper Top End	18.5	13.42
Lower Top End	21.01	15.25
Barkly	16.45	11.94
Central NT	20.26	14.70
Northern Territory	19.05	13.83

not drank alcohol in the previous 12 months, 20% had drunk during that 12 months but not in the previous week and 38% had drunk in the previous week. The figures for females were 69%, 12% and 19% respectively. These statistics were for urban dwellers in the NT. However, a survey by the Australian Bureau of Statistics (1994) reported the proportion of drinkers found in urban areas was similar to that found among Indigenous people throughout the country.

A 1998 study of the regional variation in alcohol consumption in the NT indicated per capita consumption among Indigenous drinkers (regular or occasional) was 1.97 times higher than the national average (Gray & Chrikritzhs, 1999). That of non-Indigenous drinkers was 1.43 times the national level. Regional breakdowns in per capita consumption (Table 4.9) indicate consistently higher Indigenous per capita consumption across the main regions of the NT.

In 1995, eight Top End NT Indigenous communities had established licensed clubs. Per capita consumption for male drinkers in these communities in 1994–95 was 42.5 litres of absolute alcohol and this figure was 76% higher than the per capita consumption of absolute alcohol for the NT as a whole (d'Abbs, 1998). NT per capita consumption was 42% higher than the national level. Similar figures were obtained for Indigenous female drinkers on these communities.

Studies examining drinking patterns in communities with licensed clubs suggest chronic high-level consumption occurs rather than the sporadic binge drinking by Indigenous people in towns. Watson, Fleming and Alexander (1991) studied substance use in 55 NT communities and consumption patterns varied according to the liquor status of the communities. More people drank on communities with clubs and they tended to drink more frequently. In communities with clubs, 83.6% of males aged 15 or more consumed alcohol. This figure is higher than on communities with no liquor restrictions (d'Abbs, 1998). A much smaller proportion of females consumed alcohol (18.5%) and this is similar to the proportion found in

other settings. Two thirds of drinkers in communities with clubs reported drinking 4–7 days a week, compared to only one third of those residing in communities with no restrictions.

A more recent study (Hoy, Norman, Hayhurst and Pugsley, 1997) on one community with a licensed club indicated 24.7% of females and 84.8% of males consumed alcohol and 90% of these people drank six nights a week. 62% of male and 36% of female drinkers would consume 10 or more drinks a night until their finances were exhausted. In d'Abbs (1998) study above, 80% of males and 25% of females were drinkers in the communities with clubs.

A range of factors appears to be associated with drinking at harmful levels. Indigenous high risk drinkers, when compared to their low risk counterparts aged 18 years and more, were more likely to have left the educational system before 15 years of age and to be unemployed or not participating in the labour force. They were also more likely to receive income support through government pensions, to earn an annual income of less than $10,00 and to come from a non-English speaking household (ABS & AIHW, 1999).

> *Alienation, despair, depression, anxiety and psychosis all contribute to the use of substances in an attempt to escape or temporarily relieve symptoms. A social milieu of unemployment and mainstream hostility makes the abuser of substances in a community worse and there is a powerful feedback loop through which the abuse of substances creates more misery for the abuser and for family and friends.* (Royal Australian and New Zealand College of Psychiatrists, in House of Representatives Standing Committee on Family and Community Affairs, 2000, pp. 89.)

Alcohol-Related Harm. A 1994 survey (Australian Bureau of Statistics, 1996) reported 57% of Indigenous people in the NT considered alcohol consumption to be a serious health issue, and this concern was higher in Darwin (72%) than other urban centres (61%) or rural areas (53%). The majority of Indigenous people surveyed (79%) stated alcohol consumption was the leading substance misuse issue for Indigenous people. The proportion of Indigenous people accessing alcohol and drug treatment centres in the NT has increased from 33% of all admissions in 1996/97 to 43% in 1998/99 (Alcohol and Other Drugs Program, 1999).

Indigenous people are becomingly increasingly over-represented in treatment agency admissions given their proportion in the NT population. It is a significant contributing factor to the high rates of injury among Indigenous people (particularly road accidents, intentional injury and

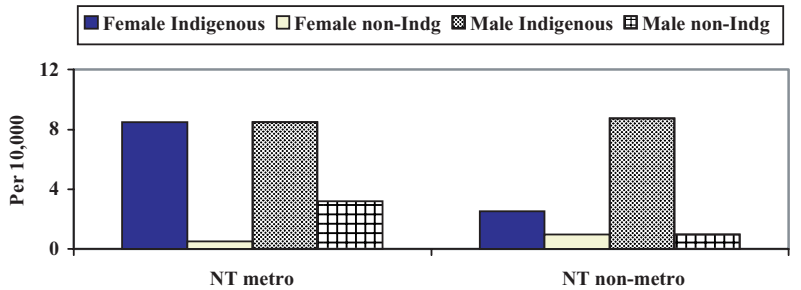

Figure 4.2. Overall death rates (per 10,000) wholly attributed to alcohol conditions, by sex and Aboriginality, 1991–97.
Source: Chikritzhs et al., 1999.

domestic violence) (House of Representatives Standing Committee on Family and Community Affairs, 2000).

A significantly higher proportion of Indigenous people die from alcohol-related causes. Between 8–10% of deaths are estimated to be alcohol related and this is three times higher than for non-Indigenous people (Gray, 1990; Hicks, 1985; Unwin et al., 1994; Deansen et al., 1986; Alexander, 1990). In a Western Australian study Indigenous men were at least eight times more likely and Indigenous women at least twelve times more likely to be admitted to hospital for alcohol-related disorders (Veroni et al., 1993). A study by the National Drug Research Institute (Chikritzhs, Jonas, Heale, Dietze, Hanlin & Stockwell, 1999) reported, regardless of sex or region, Indigenous people in the NT have higher rates of wholly alcohol attributable deaths compared to the remainder of the NT population (Figure 4.2).

Alcohol consumption, particularly to the point of intoxication, also brings many Indigenous people into contact with the criminal justice system. In the NT, public drunkenness is not an offence and individuals considered to be intoxicated in a public place are apprehended without arrest and placed in Protective Custody, usually up to six hours in police cells or a sobering up shelter. In 1998/99, there were 14,914 Protective Custodies of Indigenous people (10,887 males and 4027 females) and Indigenous people were apprehended at a much higher rate than non-Indigenous people (980 males and 68 females). Significant numbers of Indigenous youth (especially males) drink simply to become intoxicated but do not see their drinking as a problem despite the fact that half had been in alcohol-related trouble (a high level of fighting occurs among the 16–17 year old drinkers) (Health Education Unit, 1998).

Petrol. Petrol sniffing (inhaling petrol fumes for the intoxicating effect) was first introduced in north Australia by American servicemen

stationed there during World War II (Brady, 1992). In the 1950's, there were reports of petrol sniffing in the Arnhem Land Indigenous communities of Milingimbi, Galiwinku and Oenpelli, followed by Maningrida, Ramingining, Ngukurr and Numbulwa in 1960s. In 1980s Top End petrol sniffing was also noted in Bathurst Island, Port Keats, Bulla Camp and Angurunga. It has also occurred in Warrawi, Gapuwiyak, Beswick, Borroloola, Yarralin and Lajamanu. Brady (1992) reported that by 1985 there were 23 communities in the NT where petrol sniffing was known to occur and 35 petrol-related deaths were recorded between 1981 and 1988. The overall age range was 10 to 34 years, but the vast majority of those dying from petrol-related causes were males (n = 34) aged 15 to 19 years (n = 16).

Consistently low levels of petrol sniffing have been reported among Indigenous Australians (2–6%) and it is more common in remote communities where other substances are less available (Hando, Hall, Rutter & Dolan 1999). Brady & Torzillo (1994) argue that the intensity of sniffing changed over the previous 20 years, with more people sniffing for longer, and this resulted in an increase in both morbidity and mortality from the 1980s onwards. Many communities have major concerns about petrol sniffing by young people given its toxic effects, serious health consequences and anti-social behaviour associated with the intoxicating effects of this substance (Brady, 1992).

Petrol sniffing is generally a social activity and undertaken within peer groups, in both Indigenous and non-Indigenous youth (Brady, 1992; Carroll, Houghton & Odgers, 1998). It remains the most common form of inhalant substance misuse in the NT and Indigenous youth are more likely to participate in this activity (Condon et al., 2001). A 1994 survey was reported that 18% of Indigenous youth (aged 13–24 years) and 25% of those 25 years old or older viewed petrol sniffing as problematic in their region (Australian Bureau of Statistics, 1996).

A survey conducted by Mosey (1997) estimated there were 200 known petrol/inhalant sniffers in Central Australia, 60 in Alice Springs and 140 resided on at least ten remote communities. This number of sniffers represents 1.5% of all young people aged between 8–25 years in the region. The age range of sniffers was 8–30 years and males outnumbered females three to one. The majority of these young Indigenous people sniffed sporadically, usually commencing in the evening and continuing until the next day.

It has also been reported that sniffing increases when the levels of family drinking and/or violence is at its heaviest (Health Education Unit, 1998). Waves of sniffing typically commence at the start of 'wet' season (wet, hot, humid monsoon weather) and the influx of people from outstations, the return of school boarders and the isolation of many communities by monsoon floodwaters. It was suggested a critical mass builds up when there are many unoccupied young people with few options for activities

(Brady, 1992). There is some evidence that ring leaders (generally expert sniffers who prefer petrol to alcohol and may be chronic users) arrive and engage in active recruitment of other young people. Cessation of a wave of petrol sniffing usually coincides with end of wet season. Chronic users will move to other communities if avgas (or other initiatives) is introduced and they will recruit new groups in these communities.

Groote Eylandt women:

They sniff because their friends sniff. New generation, when they see friends sniff, they like to go and sniff. When they have problems at home, it makes them forget about problems. They think nobody cares, doesn't love them. *(from Brady, 1992, pp.)*

The reported health effects of sniffing include anorexia, vomiting, coughing, insomnia, abdominal pains, fitting, fatigue, headache, aggression, depression, irrationality, difficulty concentrating, memory loss, hallucination and weight loss (MacLean, 1998). Brain damage is less prevalent with unleaded petrol. Sniffers often present to health services with neurological problems, pneumonia, septicaemia and burns. There is the possibility that Sexually Transmitted Disease (STDs) rates are higher among sniffers. The overall health effects on the sniffer depend on the underlying health status and, in the case of Indigenous people, it is well documented that the various age groups have a poor health status than their non-Indigenous counterparts.

Central Australian woman:

I have three sons who sniff and I have to care for them on my pension. I have to lose sleep to look after them. They make me so sad the way they throw rocks around and axes. I feel so sorry for them now they've become really sick . . . I am a widow now and a woman alone, looking after a sick son. He is ***Nyumpu*** *(sick spirit) and weak and he is so sad and depressed . . . Petrol is killing him off and he is weakening . . . He's too disturbed . . . He can't understand anything anymore. He can't talk, he doesn't ask about money, nothing. He can only see out of one eye and he is getting blind . . . His brain is beginning to shrivel and he's lost his mind.*

Years ago when he was a child and living with his mother and father, grandmother and grandfather, he was a good kid and he did what he was told and he listened to us . . . But as he grew up he started doing what he wanted to do and he demanded to have his own way. He'd say "ngayuku kututu nyangatja!" this is my spirit not yours. (Mosey, 1997, pp. 23–4)

Some of the documented cost to individuals are: incarceration due to criminal activity, family breakdown, alienation, school absence, early school leaving, immediate and long term health effects and criminality (MacLean, 1998; Mundy, 2001). The cost to families include shame, loss of control, fear of violence, loss of morale, stress, distress and possibly long term care of the disabled. There is coronial evidence of 63 petrol-related deaths in Western Australia, South Australia and the Northern Territory in the ten-year period 1981–1991. From 1/1/93 to 1/9/97, there were 168 petrol-related admissions in the NT, equaling 1938 days of hospital stay, with estimated cost to health system of $1,453,500. Each evacuation of a sniffer requiring urgent hospital care is $20,000, followed by the cost of rehabilitation. Care of one severely brain damaged male (ex-chronic sniffer) in Alice Springs cost Territory Health services over $160,000 annually (Mosey, 1997) and secure accommodation for a violent ex-sniffer costs $750,000 per year (d'Abbs, 2000).

Sniffing can cause a large degree of disruption to communities, with anti-social behaviour, inter-family fighting, frequent break-ins, damage to houses, community stores and vehicles and loss of young people through death. For example, Mosey (1997) reported in 1996 two sniffers caused $150,000 damage in one week in one remote community in Central Australia. The deaths of even three or four young people can have a devastating impact on a community of 200–300 people (Mundy, 2001). Brady (1992) suggests Indigenous youth on remote communities may be exercising one of their few remaining powers: the right to do whatever they want with their own bodies. She argues their attempts to look different, by adopting certain styles of clothes and forming or joining gangs, are designed to make people notice they have power. It may also give them some pride. Sniffing may provide a sense of power, especially if people become frightened and the young people can persuade parents to do things ("boss over mother and father"). It may also be an expression of opposition to mainstream traditional Indigenous culture.

Tobacco. Indigenous Australians obtained tobacco from a number of sources (Brady, 1998). Bush tobacco can be quite strong and was used differently by Indigenous Australians. The tobacco was mixed with ash, which helped to free up the nicotine, and the resulting wad was placed behind the ear where the skin would absorb the nicotine. Two tobaccos were traded into Australia, probably from New Guinea and the Celebes. The Macassans visited annually hunting for trepang and traded a number of items including tobacco and pipes and Arnhem Land people still use the long Macassan pipes for smoking tobacco.

Two leading causes of death and disability are heart disease and respiratory disease (Plant, Condon & Durling, 1995). Smoking is recognized

as a risk factor contributing toward these conditions (Australian Institute of Health and Welfare, 2000). In 1994 a higher proportion of Indigenous males in the NT smoked than Australia-wide (59% : 54%), whereas Indigenous females had lower rates in the NT than Australia-wide (36% : 46%) (Australian Bureau of Statistics, 1996). Smoking rates among Indigenous people in the NT declined overall from 1987–94 (55.8% : 47.3%) but the decline was confined to the Top End.

The overall rates among Indigenous Territorians are higher than that for other Territorians (30.9% regular smokers in 1998) and Australians in general (22.5% regular smokers) (Fitzsimmons & Cooper-Stanbury, 2000). It should be noted that Watson, Fleming & Alexander (1988) found one quarter of those in the 1986–87 survey of Indigenous smokers chewed tobacco (mainly Indigenous women and some older Indigenous men) and two thirds of these lived in Central Australia.

A study by Measey, d'Espaignet & Cunningham (1998), estimating the number of deaths and hospitals admissions in the NT resulting from tobacco smoking in the period 1986–95, indicated substantially higher smoking-related deaths and hospitalizations for Indigenous people. Smoking-related deaths were seven times higher among Indigenous women than in non-Indigenous women and three times higher in Indigenous males when compared to non-Indigenous males. Indigenous males were twice as likely to be admitted to hospital for smoking-related illnesses than non-Indigenous males, while Indigenous females were three times more likely to be admitted for such conditions than other NT women.

Amphetamine-Type Substances, Opiates and Marijuana. Very few studies have focused specifically on Indigenous illicit substance use. The National Drug Strategy Household Survey (1994) provides the best prevalence estimates to date (Hando et al., 1999). The results of this survey indicated a higher prevalence of illicit drug use among urban Indigenous people compared to the general population for both lifetime (50%: 38%) and recent (past year) use (24% : 15%). This difference is largely attributable to higher levels of marijuana use (lifetime: 48%; past year: 22%).

This survey also reported 3% of Indigenous people had injected illicit drugs in their lifetime and two other national surveys indicated consistently low levels (5%) of injecting drug use (MacDonald, Wodak, Ali et al., 1997; Loxley, Caruthers & Bevan, 1995). However, the 2000 Illicit Drug Reporting System (IDRS) found 11% of injecting drug users participating in the national study identified as being of Aboriginal and/or Torres Strait descent (Topp, Darke, Bruno, Fry, Hargreaves, Humeniuk, McAllister, O'Reilly & Williams, 2001) and the same proportion was reported in the NT (O'Reilly & Rysavy, 2001). Northern Territory Drug Trends 1999 and 2000 (Rysavy, O'Reilly & Moon, 2000; O'Reilly & Rysavy, 2001) both

indicated increasing numbers of Indigenous people using illicit drugs and identified injecting drug use as an emerging issue.

A series of snapshot surveys of clients of the Darwin needle/syringe program confirm injecting drug use as an emerging issue. There was an increase in the proportion of Indigenous clients, with 8% identifying as Indigenous in early 1998 (Roberts, 1998a) compared to 13% in late 1998 (Roberts, 1998b) and 15% in 1999 (Roberts, 1999). The majority of Indigenous clients injected daily. Morphine was the last drug injected by the majority of these Indigenous clients, but the preferred drug was heroin (Roberts, 1999). Half of the Indigenous clients tested positively for the Hepatitis C virus and the pattern of blood borne viral (BBV) infection was similar to that of non-Indigenous injecting users (Roberts, 2000).

A study by Shoobridge in 1997 revealed under half of Indigenous injecting drug users in the sample used new injecting equipment and it was argued that this reflected cultural beliefs and pressures on needle sharing practices. If needle sharing is at this level in Indigenous drug users across the country then one would predict an increase in HIV notifications in Indigenous people, particularly if reports of transitions to intravenous administration of drugs and an increase of the uptake of injection of drugs are reliable. The very high imprisonment rate for Indigenous people also continues to expose them to unsafe injecting practices (ANCARD Working Part, 1977). Currently, there is a similar rate of HIV notification for both Indigenous and non-Indigenous people, but while the rate is declining among the non-Indigenous population, it is increasing in the Indigenous population (ANCARD Working Party, 1997). Although sexual contact between men is the main mode of transmission, the proportion of Indigenous people reporting heterosexual contact as the mode of transmission is much higher (27% : 8%). Indigenous people also have extremely high rates of sexually transmitted diseases (STDs), which in turn may increase the likelihood of HIV transmission, particularly if there is genital ulceration. Hepatitis C is mainly transmitted through the sharing of contaminated injecting equipment. There is very little knowledge of the incidence or prevalence of Hepatitis C and the associated risk factors in the Indigenous population.

The use of marijuana is double the general population figures for the 14–19 year age group of Indigenous youth (Davey & Dawes, 1994). Marijuana was reported to be causing increasing concern in some remote NT communities, with more young people, women and traditional Indigenous people using the substance (O'Reilly & Rysavy, 2001; Rysavy, O'Reilly & Moon, 2000). A recent NT Police Drug Enforcement strategy targeting drug smuggling confirms increasing cannabis and other drug use in remote Indigenous communities. Police stated cannabis was being smuggled into

communities on a regular basis and supplies were often from Darwin (Northern Territory News, 2001).

The Tiwi Islands were the first to be targeted due to the large degree of community concern about the level of drug use on the islands and the belief that the police had lost control of the community. Some key informants in the Northern Territory 2000 IDRS (O'Reilly & Rysavy, 2001) claimed amphetamine use was increasing in Indigenous people and, in some cases, use was becoming a rite of passage to manhood for young males.

There was the belief that prison exposed Indigenous people to amphetamine and opiates and, when released, many would experiment with these substances. These individuals introduced other members of their community to drug use, and the typical pattern was to begin with amphetamine then move on to morphine. This has the potential to be a serious issue in the NT where Indigenous males represent 63% of detained or imprisoned persons (Ogilvie & Van Zyl, 2001).

Kava. Kava was first introduced to the NT in the early 1980's after a group of Indigenous people from Arnhem Land visited Fiji. It was anticipated that the introduction of kava would result in a reduction in the social, economic and health costs associated with problematic alcohol use in these communities. It was legally imported into Australia as a food beverage.

The background to the Northern Territory Liquor Act of 1979 (see section 4.2.1) and the process of revoking all previous alcohol restricted areas in January 1981 set the scene for the introduction of kava in Arnhem Land. For example, Ramingining was a restricted area until 1981 and after much protracted effort it regained its restricted status in 1984. During this time levels of alcohol use escalated and the community was experiencing serious problems with alcohol-related violence (d'Abbs, 1987). In 1983, the community attempted to restrict alcohol availability without the aid of dry area legislation and declared itself a dry community. These self-imposed restrictions were not effective, however, and a successful application was made to the Liquor Commission for a declared restricted area. The ensuing reduction in alcohol availability was accompanied by a corresponding increase in kava consumption. Some of these key elements were also apparent in other communities and by the late 1980's, kava was widely consumed in Arnhem Land and use remains mainly confined to this region (d'Abbs, 1987; Trevena-Vernon, 1999).

Concern about the increasingly high levels of kava use in Arnhem Land led to the development of the Kava Management Act, which was passed in May 1998, imposing a total ban on the sale and supply of kava in the NT. The total ban was followed by the introduction of a licensing system whereby kava would only be available in licensed areas from a

licensed retailer. At this stage three communities in east Arnhem Land have been granted a license for kava consumption in designated areas.

Watson et al. (1988) reported 25% of Indigenous people (40% of men and 10% of women) in eastern and western Arnhem Land drank kava and 70% of people drank kava at least weekly, with 20% drinking it on a daily basis. One study reported 70% of men and 30% of women drank kava in the kava-using communities of eastern Arnhem Land (d'Abbs, 1993). The rise in consumption coincided with an increase in the number of kava traders (mainly from Tonga) in the region (Trevena-Vernon, 1999). A recent three year investigation into the health effects of long term kava use in Arnhem Land found kava users consumed up to 76 times the recommended dose for anxiety treatment (Clough, 2001).

Heavy kava use has been associated with economic, social and health problems. Regular and/or heavy kava users are more likely to report ill health and can suffer from malnutrition and weight loss (Trevena-Vernon, 1999). Kava use is also thought to be associated with greater risk of serious infections, heart disease, kidney and liver problems and skin disorders (Clough, 2001; Condon et al., 2001; Spillane, Fisher & Currie, 1997; Trevena-Vernon, 1999) but long term use does not appear to be associated with any brain damage (Clough, 2001).

The Kava Sentinel System was introduced by Territory Health Services in 1998 to monitor the effects of the Kava management Act and to determine how well placed Arnhem Land communities were to deal with a regulated supply of kava. The ban was reported to be associated with improvements in health and an increased level of activity in many kava using communities, with more people fishing, hunting, working and taking part in ceremonies and cultural activities (Trevena-Vernon, 1999). Many communities across eastern and western Arnhem Land reported the kava ban had improved quality of life and there was a return to traditional ways. However, as the ban continued and licensing failed to be fully implemented, there were reports of a an active kava black market, increased alcohol consumption and a major increase in the amount of marijuana being used in all communities involved in the Kava Sentinel System.

In summary, Indigenous health and wellbeing has improved, somewhat, since the 1960s. However, they are surviving childhood only to die early in adulthood. The reasons for premature death are many and varied, but tend to be lifestyle-related: Substance misuse and abuse; violence; diet; and nutrition. These lifestyle problems are firmly embedded in the political, economic, and social environment of Indigenous Australians. They are situational rather than cultural dispositional, and glocal rather than either global or local. And that is particularly so for Indigenous youth.

HUMAN SERVICES NEEDS

Broadly speaking, these can be divided into three major categories, namely (i) intervention and (ii) prevention, which are outcome-based, and (iii) community capacity building, which is process based. In the NT, as elsewhere, interventions tend to have a relatively 'global' ethos; prevention initiatives are often local in origin; and community capacity-building tends to result from a pluralistic meld of both global and local influences and agencies (for earlier examples of this kind of analysis, see O'Gorman, 1992; or, Sinha, 1984).

Interventions

Acute interventions are band-aid measures designed to prevent intoxicated people from harming themselves and/or others. They include for example refuges, detoxification facilities, protective custody, sobering up shelters, and night patrols. In the NT, the main types of acute services available for Indigenous people are sobering up shelters, protective custody, and night patrols. There is one generic detoxification facility, and this is located in Darwin.

Therapeutic interventions are services that aim to provide forms of therapy and life skills counseling. Examples of such services are drug and alcohol agencies that provide non-residential information, assessment and referral, counseling or therapy, support groups, relapse prevention, and life skills courses. Residential services generally provide a program for a set length of time, anything from a month to a year or more. These programs may be structured, semi-structured, or simply consist of "time out." Services provided within such programs can include counseling, group work, education, training for employment, and life skills training.

In the NT, there are no Indigenous-specific drug and alcohol agencies providing non-residential services. The orientation of the Indigenous-specific agencies is urban residential treatment programs based on 12-step approaches for alcohol problems (Brady, 1995; Brady, Dawe & Richmond, 1998; Hando et al., 1999). Such models do not adequately consider the social context of drinking, and continue to focus on the individual, who is required to separate from family and community in order to receive "treatment." Individuals then return to an unchanged local environment and pressure to re-identify with group expectations. Relapse is inevitable for some, particularly those disadvantaged by lack of support or after-care programs to assist with re-integration into the wider community and maintenance of the desired level of alcohol use (Atkinson & Jessen, 2000). The appropriateness of pharmaco-therapies is unknown, but an evaluation

of such interventions is currently in process in Victoria (Hando, Hall, Rutter & Dolan, 1999). There is some exploration of home-based detoxification, in conjunction with Indigenous communities in South Australia (Larson, 1996; Shoobridge, 1997).

Thus, the problem with urban residential programs, and with therapeutic interventions as a whole is that they are insufficiently glocal to render them sustainable. They remain essentially band-aid.

Prevention

In the NT, there have been some sporadic media campaigns designed to reduce consumption of alcohol and tobacco within Indigenous communities. But these have not, to our knowledge, been based on any a priori analyses of need, appropriate styles of communication, or required message content (for an example of the kind of analysis that might be required, see MacLachlan, Carr, Fardell, Maffesoni, & Cunningham, 1997). Nor has the impact of such campaigns (typically, television advertisements), on subsequent attitudes and behavior, been formally evaluated. This is despite the fact that media campaigns, in the AOD area, often have unintended adverse effects, for example stimulating interest where beforehand there was none, or providing enough information to make a "yes" rather than "no" decision (Fountain, Bartlett, Griffiths, Gossop, Boys, & Strang, 1999).

Some Indigenous communities have attempted to provide recreational activities as an alternative to substance use (see also, "Future Directions in Aboriginal and Torres Strait Islander Emotional and Social Well-Being [Mental Health] Action Plan, 1995"). Indigenous community initiatives relating to diversions for youth have often focused on sport, particularly football (global influence). However, there is a lack of non-sport recreation facilities, and this has been argued to be a key factor in the increase of social sniffers (Mosey, 1997). Most communities have adequate football and basketball facilities but few, if any, places in which to have non-sport evening and weekend activities (such as discos, pool tables, video games, art and craft for income). Both Indigenous and non-Indigenous youth require more than just distractions, and programs must assist in the formation of a critical mass of young people doing interesting, rewarding, and exciting things (Brady, 1992).

Supply Reduction is one of the most commonly employed, locally based interventions in the NT to limit alcohol consumption and reduce alcohol-related harm. This is evident in replacing petrol with Avgas (aviation fuel), the declaration of dry areas, wet areas where canteens control the sale and consumption of alcohol, and use of local by-laws and liquor licensing regulations to restrict trading hours and impose limits on volume

and type of alcohol that can be purchased. A review of the impact of restrictions on alcohol availability in rural and remote regions of northern Australia, indicate that such restrictions have an impact on alcohol consumption, and a significant impact on alcohol-related harm, particularly violence (d'Abbs & Togni, 2000). Such local measures need to guard against increases in consumption of other substances, such as kava (d'Abbs, 2000). They also need to guard against illicit grog runners and unscrupulous suppliers of various kinds (Pearson, 1999).

In summary, when we consider the various band-aid measures against alcohol and other drugs, whether global or local in character, we see that they are not able in themselves, either alone or in conjunction, to fully address the continuing concerns that Indigenous communities have expressed about alcohol and other drugs.

Community Capacity-Building

Whilst it is undeniable that band-aid solutions have a role to play, that role is essentially reactive rather than proactive, and focused on short-term outcomes rather than long-term process. According to the glocal analysis offered at the beginning of this chapter, appropriate interventions will vary from context to context, depending upon the precise combination of local and global factors interacting at the particular time and place concerned. Accordingly, the only generalizations able to be made will refer to processes, and process skills, rather than outcomes and specific skills.

In line with a stated objective of the NT government to reduce reliance on urban institutional programs, the NT Government's program "Living With Alcohol" aimed to increase the capacity of Indigenous communities to provide support and care services for people in communities experiencing harm from alcohol or drug use (LWA, 2000). The type of services envisioned were community education and prevention, early and brief (minimal) interventions, counseling, support, and after-care. Thus, a community development project was established to work with communities to identify the issues and explore the types of services that could be facilitated within rural and remote Indigenous community settings.

A community of 800–1000 people in a very remote setting identified a key issue as a lack of access to support and care in the community from people experiencing alcohol-related (Atkinson & Jessen, 1999). People were very reluctant to leave the community to attend urban alcohol treatment services. The community was in the process changing its status from dry to wet with the establishment of a licensed club (wet canteen), thus increasing the access to alcohol. This moved aimed to reduce drink driving, and to halt urban drift in young people. Extensive consultation and discussion

between LWA and key decision makers in the community (community elders and traditional owners, community government council, and senior family members) resulted in the establishment of local community-based alcohol and drug workers. These workers were to educate the community about the effects of various substances, provide support and care services and to facilitate the development of community-based strategies to reduce substance related harm. These local people would be able to utilize existing community infrastructure and structures and meet community need in a culturally appropriate way.

To date, these workers have raised awareness of the harm associated with tobacco use (generally not raised as an issue by Indigenous people), educated community members about alcohol and other substances (tobacco and marijuana), and established working relationships with other workers in the community. The authors argue that the preliminary results in this community are encouraging, and that this community development model may be an appropriate alternative for other communities in the NT.

Obviously, the skill and knowledge base of such community-based workers would need to be quite broad, to match broad community need. That raises the issue of how this could be acquired or developed. The project has been examining the issue, but there is little indication, yet, as to how training for knowledge and skill knowledge based could be provided on an on-going basis. A number of regional workshops brought community based alcohol and drug workers together to increase knowledge and skills, discuss issues and provide support.

The question of sustainability also relates to economics. The engagement of community-based workers involves a commitment of resources and possibly the injection of funds from outside sources. In the above case study, the workers were employed through the CDES, or Community Employment Scheme (equivalent to a Work for the Dole scheme). Given the high level of skill and knowledge required, high demand from the community, and the isolation from other alcohol and drug workers, it could be argued that such a low income is unreasonable given the high expectations placed on such workers. However, the authors do not describe a process for ensuring the sustainability of this knowledge and skill base (for example, how to ensure this knowledge and skill stays in the community if the community-based workers left for other employment opportunities).

Also, the sheer diversity and number of communities in the NT raises an equity issue if funding was to be sought from the NT government. It is unlikely that the government would fund the employment of community-based alcohol and drug workers in all communities that identified alcohol and drug use as issues for their community. In such a competition based scenario it is difficult to imagine that an 'equal playing field' exists, that

all communities would have an equal capacity to successfully argue for funding. An alternative may be the funding of all communities seeking to develop similar models. The savings resulting from a reduction in the cost of alcohol-related harm may well outweigh the government outlay of community based programs, and, in the long term, not only reduce the economic burden to the government but significantly decrease the cost to the NT community at large.

The above approach leaves one fundamental question unanswered. That is the question of economic integration, and becoming part of the wider global economy. In his analysis of Aboriginal poverty, Pearson (1999) identifies welfare as a major impediment to development within Indigenous communities. According to Pearson, welfare creates dependence mentality ("something for nothing"), which replaces traditional beliefs in reciprocity ("something for working"). This then sets the scene for alcohol and petrol sniffing to take hold within the community, and for the kind of bastardization of traditional values of sharing that we outlined earlier. The wider solution to this kind of conspiracy of circumstances, according to Pearson, is for Indigenous people to take repossession of their traditional sense of responsibility to earn a living (versus the "right" to welfare). And the best way to do this, Pearson suggests, is through economic integration with the wider economic community. CDES jobs, such as "painting rocks and mowing lawns and 15 boys hanging off the rubbish truck" are demeaning (1999, p. 26). Instead, what are really required are real jobs.

In most Indigenous communities, drinking is not a major problem except in 16 to 17 year olds who are unemployed or underemployed and 18 to 20 year olds, especially in communities with licensed premises. Alcohol is viewed as a symptom (consequence) of greater problems, i.e., structural issues of literacy, education and employment (Living With Alcohol, 1999). In systems terms, it is not difficult to see how real jobs could provide the basis of "virtuous" rather than "vicious" socio-economic circles within Indigenous communities. If the adults are engaged in meaningful activities, then youth will see that there is a future different to sitting around getting bored, using substances to alleviate boredom, numb pain, depression and the like. The same might lessen crime among youth as well, much of which functions to alleviate boredom. Even going to prison, in such communities, can provide something to do, time out, and some education and training. For these youths, having a criminal conviction does not limit their chances of a job, because these are seen to be minimal anyway. Thus, Indigenous communities need real business enterprises that are sustainable in the global marketplace and appropriate to the local conditions.

One such program is already in full swing across the Northern Territory. This is funded by the Office of Aboriginal Development, but is focused

on Indigenous communities developing their own small business enterprises, at their own pace and under their own terms (Ivory, 1999). In his role as program coordinator, Ivory works merely to facilitate rather than 'lead' economic development in rural and remote Indigenous communities. As Ivory points out, economic activities were thriving in Australia long before Europeans arrived, including regional trade and commerce (1999, p. 62). In the time since colonization however, pastoralism and other forms of "development," including welfare, have subverted these traditions, communal awareness of which Ivory has helped to re-kindle in a growing number of small business development projects. A major impetus to such developments, according to Ivory, has been the old paradigmatic welfare system itself, including a "fund and forget" approach to community development projects (1999, p. 64).

Working closely within Indigenous communities, and at a pace and scale determined by them throughout, this micro-level program is starting to produce thriving businesses in for example Indigenous cosmetics, packaged water, gravel extraction, trepang harvesting, and ethnic tourism. Out of these relatively successful socioeconomic experiences, for which Ivory reports there is huge further demand in the bush, has emerged a human factors model of Indigenous Business Development (for details, see Ivory, 1999). In stage one this model, and facilitated by Ivory (who represents the Office of Aboriginal Development), Indigenous owners take time to appreciate the causes of their poverty, and how to break out of it by engaging with the wider economic system. This includes a review of the perspective of "Balanda," or non-Aboriginal cultures. In stage two of the model, the prospective entrepreneurs define the cultural objectives for their project. The stakeholders then develop their own business flow chart, which is designed to navigate the bureaucratic maze (p. 65). Overall, and with a minimum of "intervention" by the Office of Aboriginal Development, the meld of local and global in this program has produced business development projects "with a vengeance" (Ivory, 1999, p. 70).

Those communities with wet canteens could use part of the profit to pay full time wages to community-based AOD workers who would do a lot of work around educating about health, alcohol and substance use, responsible use and the like. Profits might also go toward assisting the development of business enterprises, such as those presently found under Ivory's model and program. The capital generated from such businesses would then circulate around the community rather than being drained out into the coffers of grog runners, suppliers, and manufacturers. On dry communities, there also needs to be AOD workers who can provide advice about harm minimization when people go to towns so they do not binge and get stuck there, either becoming sick or ending up in cells, experiencing

violence, breaking taboos, and traditional law, meaning that they are not then able to return to the community.

In conclusion, we are recommending the development of a community rehabilitation model which draws on *local* traditions to engage with a *global* economy, in order to tackle community issues like alcohol consumption and petrol sniffing. As such, this is a model of community development that is inherently glocal.

RECOMMENDATIONS

We realize that what we are proposing above is contentious and speculative. This is largely because we currently lack vital research information on a number of its key points.

Socio-economic Markers for Substance Use

In terms of youth substance use, the reality is that the vast majority of young people, including Indigenous youth, do not develop problematic use. This means that research could be directed at isolating the factors that differentiate those who do not develop problematic use (protective or resiliency factors) from those who do (risk factors), not just at the level of the individual but also from the psychosocial or social ecology level. Is having a meaningful job a good predictor of whether kids, both non-Indigenous and Indigenous will over-use alcohol and other drugs?

Recommendation 1: Research into factors that prevent the transition from experimental use to problematic use in Indigenous youth (protective or resiliency factors) and those that may facilitate the transition (risk factors), not just at the level of the individual but also from the psychosocial or social ecology level.

Substance experimentation may be regarded as sensation seeking, connecting to peers or rebellion. Sensation-seeking, defined as preferences for novel, unusual or risky behaviours (Zuckerman, 1979, 1994) has been consistently linked with drug and alcohol use among teenagers, and is a characteristic on which adolescent peers cluster (Donohew, Hoyle, Clayton, Skinner, Colon & Rice, 1999; Toumbourou, Sanson, Siddons, Smart, Prior & Oberklaid, 1998). Being part of a peer group is thought to be one of the most compelling factors in Indigenous youth substance use (Health Education Unit, 1998), yet the role of peers and individual psychosocial issues have been under-investigated in Indigenous youth (Brady, 1992). This is not specific to Indigenous youth, but may be of greater significance as "peer

culture" (global influence) has an enormous influence on drug use by Indigenous youth as those who strive to be different, in whatever way, are seen to be "Whites" by their peers (local influence).

Recommendation 2: Research into the role of peers and peer culture in initiation to and continued engagement in substance use by Indigenous youth in urban, rural and remote settings and in traditional versus less traditional settings.

The Meaning and Function of AOD

Experimentation of substances may be the first sign symbolizing freedom and autonomy, providing real proof of imitating adult or young adult status. It is often seen as a rite of passage for young people to experiment in such substances. Above all, it is a source of pleasure and fun, escape, and pain relief. One of the few studies examining Indigenous substance use found the main reasons why Indigenous people drank alcohol were liking the feeling and taste of alcohol, relief from worries, problems, and boredom (Watson et al., 1988). The same reasons were provided for drinking too *much* alcohol. These reasons are similar to those provided by non-Indigenous youth and adults. Bertram & O'Reilly (1998) surveyed secondary schools students in the NT and reported almost half of the 16 and 17 year old students considered that having a few alcoholic drinks was one of the best ways of relaxing. Similarly, O'Reilly and Townsend (1999) found that the main reasons for substance use in youth not in the education system were enjoyment, relaxing, socializing, and becoming intoxicated. One in four of the respondents drank to help forget about problems and difficulties in their lives. Petrol sniffing also provides pleasure, as the hallucinations can be entertaining and exciting (d'Abbs & MacLean, 2000).

Boys, Marsden, Fountain, Griffiths, Stillwell & Strang (1999) examined substance use from a functional perspective and argue that different functions are served by different drugs, and there is a different profile of functions across different substance types. For example, amphetamines are used for relieving fatigue, dieting, staying awake, night clubbing. Cannabis and alcohol are considered to be useful for relaxing in social settings. *Recognition of the diverse functions allows the possibility of promoting alternative means for fulfilling these functions*. However, the evidence for the success of diversionary programs is weak and this may be due to poor targeting of the specific functions that substance use serves for participants. Programs are often hinged on the assumption that youth are bored, and if they are encouraged to fill their time with alternative activities then they will not spend

time engaged in substance use. This is a simplistic notion, and the gains from participation in alternative activities must fulfill the same functions as drug or alcohol use and be equally attractive.

Recommendation 3: Research exploring the meaning of and functions served by various drugs used by Indigenous youth to enable the development of appropriately targeted diversionary programs or activities that are attractive and fulfill similar functions.

Involving Families

In Australia and overseas, there is an association between alcohol dependence of family members and petrol sniffing by young people. Families characterized by social and cultural breakdown are generally associated with alcohol misuse (d'Abbs & MacLean, 2000). This may also be the case for other substance misuse as well. It is clear there must be strong Indigenous community resolve for families and community decision-making structures to act cohesively in deciding on and supporting strategies and community members actively involved in implementing them. Interventions proposed by a community must be complementary to those undertaken by families, and family action must be consistent with community strategies. This would enhance a community's capacity to control the problem/s and reintegrate individuals with their families, kinship systems and community. Such interventions are unfortunately not possible with members of the Stolen Generations.

Recommendation 4: More family-based research.

Need for Evaluation

There appears to be little monitoring or evaluation of the effectiveness of respective programs and activities (Gray & Sputore, 1998; Gray, Saggers, Sputore & Bourbon, 2000). Few systematic evaluations and insufficient methodologies do not allow robust generalizations. Impact of most programs appears limited but this may be due to insufficient resources and program support (Gray et al., 2000). With a glocal approach, there is a need for some common standards across services and programs as well as procedures for monitoring ongoing processes and both formative and summative evaluation processes to assess effectiveness. There is no comprehensive solution and many interventions have been ineffective, very few have been adequately monitored or evaluated and when signs of success appear it is difficult to attribute these to the particular intervention.

This indicates the need for more rigorous evaluation in cooperation with Indigenous human services.

Recommendation 5: Rigorous evaluation of all interventions and community development initiatives.

Government Involvement

The material contained in this chapter suggests the development and implementation of a number of key initiatives. However, the success of any initiatives relies on an overarching NT government licit and illicit substance strategy, with clear goals and objectives, based on current empirical evidence on the current state of local and national substance use (O'Reilly, 2001). Such a glocal strategy would provide leadership and direction for all sectors involved in substance use issues. It would be committed to cooperative and transparent processes for developing and expanding strategic initiatives to reduce substance-related harm. An independent research and evaluation framework would provide the objective evidence and information base essential for informing licit and illicit substance policy and strategic direction and determining the effectiveness of various glocal initiatives.

Recommendation 6: *Involve government agencies in the present project*.

REFERENCES

Aboriginal and Torres Strait Islander Commission. (A.T.S.I.C). (2001). http://www.atsic.gov.au

Alcohol and Other Drugs Program 2000 *Client Admission Activity Report: All Agencies in the NT.* Darwin: Territory Health Services, Alcohol & Other Drugs Client Database.

Alexander, K. (ed) (1990). *Aboriginal Alcohol Use and Related Problems: Report and recommendations Prepared for an Expert Working Group for the Royal Commission into Aboriginal Deaths in Custody*. Phillip, ACT: Alcohol and Drug Foundation.

ANCARD Working Party (1997). *The National Indigenous Australians' Sexual Health Strategy 1996–97 to 1998–99.* Canberra: Commonwealth Department of Health and Family Services.

Anderson, P., Bhatia, K. & Cunningham, J. (1996). *Occasional paper: mortality of Indigenous Australians.* ABS Cat. No. 3315.0, AIHW Cat. No. IHW 1. Canberra: Australian Government Printing Service.

Atkinson, C., & Jessen, J. (1999). Development of community-based alcohol and other drug (AOD) workers in remote Indigenous communities in the Northern Territory. *South Pacific Journal of Psychology, 11*, 72–80.

Australian Bureau of Statistics. (1993). *Information paper: 1991 Census—Socio-Economic Indices for Areas*. ABS Cat. No. 2912.0. Canberra: Australian Government Publishing Services.

Australian Bureau of Statistics (1994). *National Aboriginal and Torres Strait Islander Survey Northern Territory.* Cat. No. 4190.7. Canberra: Australian Government Printing Service.

Australian Bureau of Statistics (1996). *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings.* Canberra: Australian Government Printing Service.

Australian Bureau of Statistics (1998). *Experimental estimates of the Aboriginal and Torres Strait Islander population.* ABS Cat. No. 3230.0. Canberra: Australian Government Printing Service.

Australian Bureau of Statistics (1999). *National Health Survey: Aboriginal and Torres Strait Islander results, Australia, 1995.* Cat. No. 4806.0. Canberra: Australian Government Printing Service.

Australian Bureau of Statistics. (2001). http://www.abs.gov.au

Australian Bureau of Statistics & Australian Institute of Health and Welfare (1999). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples.* Canberra: Ausinfo.

Australian Constitution.

Australian Institute of Health and Welfare (2000). *Australia's Health 2000.* AIHW Cat. No. AUS-19. Canberra: Australian Institute of Health and Welfare.

Beresford, Q. (1993). Aboriginal youth: Social issues and policy responses in W.A. *Youth Studies Australia, 12(2),* 25–30.

Berry, J. W. (1979). A cultural psychology of social behaviour. *Advances in Experimental Social Psychology, 12,* 127–207.

Bertram, S. & Crundall, I. (1997). *Summary of Household Survey of Alcohol Consumption and Related attitudes February–March 1997.* Darwin: Alcohol & Other Drugs Program, Territory Health Services.

Bertram, S. & O'Reilly, B. (1998). *Summary of the 1996 Australian Secondary School Alcohol and Drug Survey Northern Territory findings.* Darwin: Living With Alcohol program, Territory Health Services.

Bolitho, F. H., Carr, S. C., & O'Reilly, B. (Eds.). (2002). South Pacific Psychology: Global, local, and glocal applications. Auckland, Aotearoa: http://spjp.massey.ac.nz/

Boys, A., Marsden, J., Fountain, J. Griffiths, P., Stillwell, G. & Strang, J. (1999). What Influences Young People's Use of Drugs? A qualitative study of decision-making. *Drugs: education, prevention and policy, 6(3),* 373–387.

Brady, M. (1991, September/October). *Barriers to effective intervention in Aboriginal substance abuse.* Public Health Association of Australia Annual Conference. Alice Springs, Northern Territory.

Brady, M. (1992). *Heavy Metal: The Social Meaning of Petrol Sniffing. A Community Report.* Canberra: Australian Institute of Aboriginal & Torres Strait Islander Studies, Aboriginal Studies Press.

Brady, M. (1998). *The Grog Book: Strengthening indigenous community action on alcohol.* Canberra: Commonwealth department of health and Family Services.

Brady, M., & Palmer, K. (1984). *Alcohol in the Outback: Two studies of drinking.* Darwin: Australian National University North Australian Research Unit (NARU).

Brady, M. & Torzillo, P. (1994). Petrol sniffing down the track. *The Medical Journal of Australia, 160(121),* 176–177.

Cantor, C.H., Neulinger, K. & De Leo, D. (1999). Australian suicide trends 1964–1997: youth and beyond? *Medical Journal of Australia, 171,* 137–41.

Carr, S. C., & MacLachlan, M. (1998). Psychology in developing countries: Reassessing its impact. *Psychology and Developing Societies, 10,* 1–20.

Carroll, A., Houghton, S. & Odgers, P. (1998). Volatile solvent use among West Australian adolescents. *Adolescence, 33(132),* 877–889.

Carach, C. & James, M. (1998). Homicide between intimate partners in Australia. *Trends and Issues in Crime and Criminal Justice, No 90.* Canberra: Australian Institute of Criminology.

Carr, S. C., & MacLachlan, M. (1996). *Managing Tropical Health: Psychology for Development?* British Medical Anthropology Review, 2, 41–47.

Carr, S. C., O'Reilly, B., & Bolitho, F. H. (2000, February). *Australia: The Northern Territory.* First Pacific Island Epidemiological Workshop, Hawai'i, University of Hawai'i.

Chikritzhs, T., Jonas, H., Heale, P., Dietze, P., Hanlin, K. & Stockwell, T. (1999). Alcohol-Caused Deaths and Hospitalisations in Australia, 1990–1997. *National Alcohol Indicators Bulletin, 1,* 3.

Clark, Y. (2000). The construction of Aboriginal identity in people separated from their families, community, and culture: Pieces of a jigsaw. *Australian Psychologist, 35*, 150–157.

Clough, A. (2001, May). No Brain Damage from Kava. *Melbourne Express*, 7.

Commissioner Johnson, E., Royal Commission into Aboriginal Deaths in Custody. (1993). *Royal Commission into Aboriginal Deaths in Custody: National Report.* Vol. 4. Canberra: Australian Government Publishing Service.

Commonwealth Department of Human & Family Services (1994). *National Drug Strategy Household Survey: Urban and Torres Strait Islander Peoples Supplement*. Canberra: Australian Government Publishing Service.

Condon, J., Warman, G. & Arnold, L. (2001). *The Health and Welfare of Territorians*. Darwin: Territory Health Services.

Cowen, Z. (1973). Foreword. In G. E. Kearney, P. R. de Lacey, & G. R. Davidson (Eds.), *The psychology of Aboriginal Australians* (pp. v–vi). Adelaide, South Australia: John Wiley & Sons Australasia Pty Ltd.

Cunningham, J. & Paradies, Y. (2000). *Occasional paper: mortality of Indigenous Australians*. ABS Cat. No. 3315.0. Canberra: Australian Bureau of Statistics.

d'Abbs, P. (1987). *Dry Areas, Alcohol and Aboriginal Communities: A Review of the Northern Territory Restricted Areas Legislation.* Darwin: Darwin Institute of Technology.

d'Abbs, P. (1993). *A Review of Kava Control Measures in the Northern Territory*. Darwin: Menzies School of Health Research.

d'Abbs, P. (1998). Out of sight, out of mind? Licensed clubs in remote Aboriginal communities. *Australian & New Zealand Journal of Public Health, 22(6),* 679–684.

d'Abbs, P. (2000). Restricted areas and Aboriginal drinking. Australian Institute of Criminology. http://www.aic.gov.au/publications/proceedings/01/Dabbs.html

d'Abbs, P. & MacLean, S. (2000). *Petrol Sniffing in Aboriginal Communities: A Review of Interventions*. Darwin: Cooperative Research Center for Aboriginal & Tropical Health.

d'Abbs, P & Togni, S. (2000). Liquor licensing and community action in regional and remote Australia: a review of recent initiatives. *Australian & New Zealand Journal of Public Health, 24(1),* 45–53.

Davey, J. & Dawes, G. (1994). What is deviant? A comparison of marijuana usage within Aboriginal and Torres Strait Islander and white Australian youth subcultures. *Youth Studies Australia, 13(1),* 49–52.

Davidson, G., Sanson, A., & Gridley, H. (2000). Australian psychology and Australia's Indigenous people: Existing and emerging narratives. *Australian Psychologist, 35*, 92–99.

Dempsey, K.E. & Condon, J.R. (1999). *Mortality in the Northern Territory, 1979 to 1997.* Darwin: Territory Health Services.

d'Espaignet, E.T., Kennedy, K., Patterson, B.A. & Measey, M.L. (1998). *From Infancy to Young Adulthood: health Status in the Northern Territory.* Darwin: Territory Health Services.

Devansen, D., Furber, M. & Hampton, D. (1986). *Health Indictors in the Northern Territory*. Darwin: Northern Territory Department of Health.

Donald, W.L. Coroner (1998). *Coroners Act Summary of Findings.* 9420219 Rel, case A82/94, Northern Territory of Australia.

Donohew, R., Hoyle, R., Clayton, R., Skinner, W., Colon, S. & Rice, R. (1999). Sensation Seeking and Drug Use by Adolescents and Their Friends: Models for marijuana and Alcohol. Journal of Studies in Alcohol, 60, 622–631.

Dudgeon, P., & Pickett, H. (2000). Psychology and reconciliation: Australian perspectives. *Australian Psychologist, 35*, 82–87.

Fitzsimmons, G. & Cooper-Stanbury, M. (2000). *1998 National Drug Strategy Household Survey: State and Territory results*. AIHW Cat. No. PHE 26. Canberra: Australian Institute of Health & Welfare.

Fountain, J., Bartlett, H., Griffiths, P., Gossop, M., Boys, A. & Strang, J. (1999). Why Say No? Reasons given by young people for not using drugs. *Addiction Research, 7(4),* 339–353.

Garrow, A. (1997). Petrol Sniffing in the Top End: Time to Stop Reinventing the Wheel. ***Darwin: Alcohol & Other Drugs Program, Territory Health Services***.

Gomersall, A. M., Davidson, G., & Ho, R. (2000). Factors affecting acceptance of Aboriginal reconciliation amongst non-Indigenous Australians. *Australian Psychologist, 35*, 118–127.

Gracey, M. (1998). Substance misuse in Indigenous Australian Australia. *Addiction Biology, 3,* 355–62.

Graham, A., Reser, J., Scuderi, C., Zubrick, S., Smith, M. & Turley, B. (2000). Suicide: An Australian Psychological Society Discussion Paper. *Australian Psychologist, 35(1),* 1–28.

Gray, A. (1990). *A Matter of Life and Death: Contemporary Aboriginal Mortality*. Canberra: Aboriginal Studies Press.

Gray, D. & Sputore, B. (1998). The effective and culturally appropriate evaluation of Aboriginal community alcohol intervention projects, in: Stockwell, T. (Ed) *Drug Trials and Tribulations: lessons for Australian policy.* Perth: National Center for Research into the Prevention of Drug Abuse, pp 37–51.

Gray, D. & Chikritzhs, T. (1998). *Regional variation in alcohol consumption in the Northern Territory*. Perth: National center for Research into the Prevention of Drug Abuse, Curtin University.

Gray, D., Saggers, S., Sputore, B. & Bourbon, D. (2000). What works? A review of evaluated alcohol misuse interventions among Aboriginal Australians. *Addiction, 95(1),* 11–22.

Hando, J., Hall, W. Rutter, S. & Dolan, K. (1999). *Current state of research on illicit drugs in Australia: An information document.* Canberra: National Health and Medical Research Council, Australian Government Printing Services.

Health Education Unit (1998). *Drug Use by Young People: A Gender Approach.* Sydney: University of Sydney.

Hermans, H. J. M., & Kempen, H. J. G. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. *American Psychologist, 53*, 1111–1120.

Hicks, D. (1985). *Aboriginal Mortality Rates in Western Australia 1983*. Perth: Health Department of Western Australia.

Hill, D.J., White, V.M. & Scollo, M.M. (1998). Smoking behaviours of Australian adults in 1995: trends and concerns. *Medical Journal of Australia, 2(168),* 204–5.

House of Representatives Standing Committee on Family and Community Affairs (2000). *Health is Life: Report on the Inquiry into Indigenous Health.* Canberra: Australian Government Printing Services.

Hoy, W., Norman, R., Hayhurst, B. & Pugsley, D. (1997). A health profile of adults in a Northern Territory Aboriginal community, with an emphasis on preventable morbidities. *Australian and New Zealand Journal of Public Health, 21,* 121–6.

Human Rights and Equal Opportunity Commission. (1997). *Bringing them home: National enquiry into the separation of Aboriginal and Torres Strait Islander children from their families*. Sydney: The Spinney Press.

Ivory, B. (1999). Entreprise development: A model for Aboriginal entrepreneurs. *South Pacific Journal of Psychology, 11*, 62–71.

Kettle, E. S. (1991). *Health Services in the Northern Territory: A History 1824–1970 Vol 1*. Darwin: Australian National University, Northern Australia Research Unit.

Langton, M. (1991). Chapter in *The National Report of the Royal Commission into Aboriginal Deaths in Custody* (pp. xx–xx). Canberra: Government Publishing Services.

Larson, A. (1996). *What injectors say about drug use: preliminary findings from a survey of indigenous injecting drug users.* Queensland: Australian Centre for International and Tropical Health and Nutrition, University of Queensland.

Leonard, P. (1997). *Postmodern welfare: Reconstructing an emancipatory project*. London: Sage.

Linville, P. W., Fischer, G. W., & Salovey, P. (1989). Perceived distributions of the characteristics of in-group and out-group members: Empirical evidence and a computer simulation. *Journal of Personality and Social Psychology, 57*, 165–188.

Living With Alcohol. (1999). *Underage drinking amongst Indigenous youth in the Northern Territory: Summary paper*. Darwin: Territory Health Services, Living With Alcohol program.

Living With Alcohol (2000). *Living With Alcohol in the Northern Territory: A framework for action to reduce the costs of alcohol-related harm to the Northern Territory 1991–2000.* Darwin: Northern Territory Government.

Loxley, W. Carruthers, S. & Bevan, J. (1995). *In the same vein: First report of the Australian study of HIV and injecting drug use*. Perth: National center for Research into the Prevention of Drug Abuse, Curtin University of Technology.

Mabo and others vs. State of Queensland (1992, June). High Court decision.

MacDonald, M., Wodak, A., Ali, R., Crofts, N., Cunningham, P., Dolan, K., Kelaher, M., Loxley, W., van Beek, I. & Kaldor, J. (1997). HIV prevalence and risk behaviours in needle exchange attenders: A national study. *Medical Journal of Australia, 166,* 237–40.

MacLachlan, M., & Carr, S. C. (1994). From dissonance to tolerance: Managing health in Tropical cultures. *Psychology and Developing Societies, 6*, 119–129.

MacLachlan, M., Carr, S. C., Fardell, S., Maffesoni, G., & Cunningham, J. (1997). Transactional analysis of communication styles in HIV/AIDS advertisements. *Journal of Health Psychology, 2,* 67–74.

MacLean, S. (1998). *Prevalence and Costs of Petrol Sniffing and Other Inhalant Substance Use*. Darwin: Alcohol and Other Drugs Program, Territory Health Services.

Marsella, A. J. (1995). Urbanization, mental health, and psychosocial well-being: Some historical perspectives and considerations. In T. Harpman & I. Blue (Eds.), *Urbanization and mental health in developing countries* (pp. 17–38). Sydney: Avebury.

Marsella, A. J. (1998). Toward a "global community psychology:" Meeting the needs of a changing world. *American Psychologist, 53*, 1282–1291.

Marsella, A. J., & Liu, J. (2001, June). *Paradise lost-Paradise regained: Socio-cultural change and health and wellbeing in Pacific Island youth.* Conference and team-building meeting for Pacific Island Nations, Honolulu, Hawai'i.

Marsella, A. J., Wandersman, A., & Cantor, D. W. (1998). Psychology and urban initiatives: Professional and scientific opportunities and challenges. *American Psychologist, 53*, 621–623.

Measey, M.L., d'Espaignet, E.T. & Cunningham, J. (1998). *Adult Morbidity and Mortality due to Tobacco Smoking in the Northern Territory 1986–1995.* Darwin: Territory Health Services.

Markey, G. (1998). *The Health Status of Women in the Northern Territory.* Darwin: Territory Health Services, Women's Health Strategy Unit.

Memmot, P. (2001, February). *Report highlights violence in Indigenous communities*. Australian Broadcasting Commission, The World Today, http://www.abc.net.au/worldtoday/s247696.htm

Moon, L., Meyer, P. & Grau, J. (1999). *Australia's Young People: Their Health and Wellbeing*. AIHW Cat. No. PHE-19. Canberra: Australian Institute of Health and Welfare.

Mosey, A. (1997). *Report on Petrol Sniffing in central Australia.* Darwin: Alcohol & Other Drugs Program, Territory Health Services.

Mundy, J. (2001). Snuffing out Sniffing. *Connexions, Feb/Mar,* 6–10.
Northern Land Council (2001). http://www.nlc.org.au
Northern Territory News (2001). *NT opts out of private health cover*. May 26, 4.
Northern Territory News (2001). *Tiwis targeted in drugs crackdown*. May 26, 4.
Northern Territory Treasury (2000). *2000–01 Northern Territory Budget Papers: Budget Summary*. http://www.nt.gov.au
Ogilvie, E. & Van Zyl, A. (2001). Young Indigenous Males, Custody and the Rites of Passage. *Trends and Issues in Crime and Criminal Justice, No. 204. http://www.aic.gov/publications/tandi/ti204.pdf*
O'Gorman, F. (1992). *Charity and change: From bandaid to beacon*. Melbourne: World Vision.
O'Reilly, B. (2001, April). *Priority Areas in Illicit Substance Use in the Northern Territory*. House of Representatives Standing Committee on Family Affairs: Substance abuse in Australian communities. Darwin: Parliament House.
O'Reilly, B. & Rysavy, P. (2001). *Northern Territory Drug Trends 2000: Findings of the Illicit Drug Reporting System.* NDARC Technical Report No 104. Sydney: National Drug and Alcohol Research Center.
O'Reilly, B. & Townsend, J. (1999). *Young People and Substance Use in the Northern Territory in 1998*. Darwin: Living With Alcohol program, Territory Health Services.
Palmer, G.R. & Short, S.D. (2000). *Health Care and Public Policy: An Australian Analysis (3rd Ed)*. Melbourne: MacMillan Publishers Australia.
Plant, A.J., Condon, J.R. & Durling, G. (1995). *Northern Territory Health Outcomes: Morbidity and Mortality 1979–1991.* Darwin: Northern Territory Health and Community Services.
Pearson, N. (1999). *Our right to take responsibility*. Discussion paper for community and regional organisations. Cape York Peninsula: Cape York Council.
Peterson, N. (1976). (Ed.). *Tribes and boundaries in Australia*. Canberra: Australian Institute of Aboriginal Studies/Humanities Press.
Pols, R.G. & Hawks, D.V. (1992). *Is There a Safe Level of Daily Consumption of Alcohol for Men and Women?* National Health and Medical Research Council. Canberra: Australian Government Publishing Service.
Pratto, F., Sidanius, J. Stallworth, L. & Malle, B.F. (1994) Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67,* 741–63.
Public Health Strategy Unit. (1997). *The Aboriginal Public Health Strategy and Implementation Guide 1997–2002*. Darwin: Territory Health Services.
Reser, J.P. (2000). Indigenous suicide in cross-cultural context: An overview statement and selective bibliography of sources relevant to Indigenous suicide in Australia, North America and the Pacific. *South Pacific Journal of Psychology, 11(2),* 95–111.
Riley, R. (1998). From exclusion to negotiation: Psychology in Aboriginal social justice. *InPsych, 20,* 12–19.
Roberts, C. (1998a). *A Snapshot of HINT Clients: Characteristics of "Health for Injectors in the Northern Territory" Clients Over a Two Week Period.* Darwin: Northern Territory AIDS Council.
Roberts, C. (1998b). *Snapshot III: The 1998 Wet. Characteristics of Needle Exchange Clients during the 1998 Wet Season*. Darwin: Northern Territory AIDS Council.
Roberts, C. (1999). *Snapshot IV: The 1999 Wet. Characteristics of Needle Exchange Clients during the 1999 Wet Season*. Darwin: Northern Territory AIDS Council.
Roberts, C. (2000). Hitting up in the top end: characteristics of needle exchange clients in Darwin. *Australian and New Zealand Journal of Public Health, 24(1),* 82–85.
Robertson, R. (1995). *Globalization: Social theory and global culture*. London: Sage.

Rowse, T. (1993). The relevance of ethnographic understanding to Aboriginal anti-grog initiatives. *Drug and Alcohol Review, 12*, 393–399.

Rugimbana, R., Zeffane, R., & Carr, S. C. (1996). Marketing psychology in developing countries. In S. C. Carr & J. F. Schumaker (Eds.), *Psychology and the developing world* (pp. 140–149). Westport, CT: Praeger.

Rysavy, P., O'Reilly, B. & Moon, C. (2000). *Northern Territory Drug Trends 1999: Findings of the Illicit Drug Reporting System*. NDARC Technical Report No 81. Sydney: National Drug and Alcohol Research Center.

Shoobridge, J. (1997). *The health and psychological consequences of injecting drug use in an Indigenous Australian community.* In K. Dyer & D. Addy (eds) *New Perspectives: Proceedings of the 1997 NCETA Research Seminar Program*. Adelaide: National Centre for Education and Training on Addiction.

Sidanius, J. (1999). *Social dominance: An inter-group theory of social hierarchy and oppression*. Cambridge, MA: Cambridge University Press.

Sinha, J. B. P. (1984). Toward partnership for relevant research in the Third World. *International Journal of Psychology, 19*, 169–177.

Spillane, P.K., Fisher, D.A. & Currie, B.J. (1997). Neurological manifestations of kava intoxication (letter). *Medical Journal of Australia, 167(3),* 172–3.

Steenkamp, M. & Harrison, J.E. (2000). *Suicide and hospitalized self-harm in Australia.* AIHW Cat. No. INJCAT 30. Canberra: Australian Institute of Health and Welfare

Strong, K., Trickett, P., Trulaer, I. & Bhatia, K. (1998). *Health in Rural and Remote Australia*. AIHW Cat. No. PHE-6. Canberra: Australian Institute of Health and Welfare.

Suicide Prevention Task Force (1997). *Suicide Prevention: Victorian Task Force report.* Melbourne: Victorian Government.

Taylor, J., & Roach, L. (1998). *The relative economic status of Indigenous people in the Northern Territory 1991–1996*. Discussion Paper 156/1998. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.

The Bulletin. (1994). Drowning in sorrow. *The Bulletin, May 17*, 29–33.

Tajfel, H. (1978). *Differentiation between social groups*. London: Academic Press.

Topp, L., Darke, W., Bruno, R., Fry, C., Hargreaves, K., Humeniuk, R., McAllister, R., O'Reilly, B. & Williams, P. (2001). *Australian Drug Trends 2000: Findings of the Illicit Drug Reporting System (IDRS)*. NDARC Monograph No 47. Sydney: National Drug and Alcohol Research Centre.

Toumbourou, J., Sanson, A., Siddons, H., Smart, D., Prior, M. & Oberklaid, F. (1998). *Social-emotional factors modifying the effect of sensation seeking and depression on early adolescent substance use*. Australian Psychological Society 33rd, Annual Conference, Sydney.

Trevena-Vernon, M. (1999). *Kava Sentinel System Stage 1: East and West Arnhem Land Regional Report September 1998*. Nhulunbuy: Territory Health Services, Alcohol and Other Drugs Program.

Trudgen, R. (2001). *Why warriors lie down and die.* Darwin: Aboriginal Resource and Development Services.

Unwin, E., Thomson, N. & Gracey, M. (1994). *The Impact of Tobacco Smoking and Alcohol Consumption on Aboriginal Mortality and Hospitalisation in Western Australia*. Perth: Health Department of Western Australia.

Veroni, M., Swensen, G. & Thomson, N. (1993). *Hospital Admissions in Western Australia Wholly Attributable to Alcohol Use: 1981–1990*. Perth: Health Department of Western Australia.

Walsh, M. (1997). *Cross-cultural communication problems in Aboriginal Australia*. Darwin: North Australia Research Unit/Australian National University Discussion Paper No. 7/1997.

Watson, C., Fleming, J., & Alexander, K. (1991). *A survey of drug use patterns in Northern Territory Aboriginal communities: 1986–1987*. Darwin: Department of Health and Community Services, Drug and Alcohol Bureau.

Watson, P. (1991). Pituri: An Australian Aboriginal Drug. *International Journal on Drug Policy, 2(4),* 32–33.

Wessells, M. G., & Bretherton, D. (2000). Psychological reconciliation: National and international perspectives. *Australian Psychologist, 35*, 100–108.

Wik peoples vs. State of Queensland (1996, December). High Court decision.

Williams, R. (2000). "Why should I feel guilty?" Reflections on the workings of guilt in White-Aboriginal relations in Australia. *Australian Psychologist, 35*, 136–142.

Worchel, S. (1999). *Written in Blood: Ethnic Identity and the Struggle for Human Harmony*. New York: Worth Publishers.

Zuckerman, M. (1994). *Behavioural Expression and Biosocial Bases of Sensation Seeking*. New York: Cambridge University Press.

Appendix A

Brief Historical and Chronological Timeline

Date:	Historical Event:
114,000 B.C.	Stone artifacts, e.g., pounding tools, Northern Territory (Gracey, 1998, p. 30).
1788 A.D.	First Fleet (British).
	Est. popn. (Indigenous) = 300,000-1 million (Dudgeon & Pickett, 2000). Yet declared "Terra Nullus" (Empty Land).
19th century.	Near genocide, e.g., massacre of people of Tasmania (Wassells & Bretherton, 2000). Also given gifts of poisoned flour and diseased blankets.
Late 19th/early 20th C.	Survivors are coerced into missions and reservations, which become the forerunners of today's "communities (Riley, 1998). Or, are made into "domestics" for gentry.
	"Stolen Generations" begin: Children with some White ancestry are removed from Aboriginal parent.
1950.	Population 'bottoms out' at 50,000 (Dudgeon & Pickett, 2000).
1966.	Australia signs International Convention on the Elimination of all Forms of Racial Discrimination.
1967.	National referendum on citizenship (including rights to vote and drink alcohol).
1975.	Racial Discrimination act passed (Canberra).
1991.	Royal Commission into Aboriginal Deaths in Custody Report (Williams, 2000).
	Council for Aboriginal Reconciliation formed (Gomersall et al., 2000).
1992.	High Court overturns Terra Nullius (in favor of Mabo and others vs. Queensland).
1996.	Wik decision (again, against the government of Queensland) follows. Inquiry into the Stolen Generations begins.
2001.	Current population estimated at 400,000 (2 percent of the general population).

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Chapter 5

Fiji's Move into the 21st Century

Robin Taylor

INTRODUCTION

In early 1987, the Fiji Visitors Bureau's slogan was 'Fiji, the way the world should be'. There was good reason for stating this because Fiji appeared to have made the successful transition from a colonial state of Britain, to an independent country with apparent harmonious relations within the multi-cultural society that exists in Fiji. This was however to change in May 1987 and then again in September with two military coups, there raison d'etre being the imposition of indigenous paramouncy. The country however, appeared to have recovered with an internationally hailed revised constitution in 1997, which resulted in the election of a Fijian of Indian descent becoming Prime Minister in 1999. However, once again Fiji had an attempted coup a year later, which regardless of its success or not, has succeeded in deposing the elected government of 1999. This chapter explores the chronology and possible causes for this state of affairs along with other determinants of the psychological well being of Fiji islanders.

Location and Geography

The Republic of Fiji is about 2000 Km north of New Zealand. The precise 180th Meridian transects some of Fiji's 300 odd islands, approximately half of which are populated. The geography comprises of volcanic islands and coral atolls. Fiji is part of the tectonic 'Pacific chain of fire' which has seen the emergance of the major land masses in the South Pacific running

from west to east, Papua New Guinea, the Solomon Islands, Vanuatu and then Fiji. To the east of Fiji lies Tonga and then Samoa. One of Fiji's most easterly islands in the Lau group (Ono-i-lau), is actually closer to Tonga's capital Nuku'alofa, rather than Fiji's (Suva). There are three major islands in decreasing size they are Viti Levu, Vanua Levu and Taveuni. The total land mass area is about 18,300 Km^2. Prevailing trade winds come from the east with the consequence that the eastern shores are considerably wetter than the western parts of the islands.

Population

Fiji's current population hovers around about the 880,000 mark (Central Intelligence Agency World Fact Book, 2005). The population growth is relatively high at 1.6% but the population remains relatively stable because of the constant emmigration rate to countries such as New Zealand, Australia and the United States. Fiji consists of mainly 3 major ethnic divisions: 45% of the population is indigenous Fijians, an almost equal amount are the so called Indo-Fijians, descendents of indentured Indian labourers and the remainder is 'the rest' which consists of Chinese, Europeans and other ethnicities including 'mixtures' termed 'fruit salads' in Fiji English parlance. There is a significant presence of a Polynesian community that originates from a set of islands 300 km north of Fiji called Rotuma. Something like 2000 Rotumans live on Rotuma itself but Suva has a population of around 5000. There is also a small population of originally Gilbertese islanders who were displaced to Fiji during the atomic testing of the Gilbert islands after World War II. They live on the island of Rabi, which is to the east of Vanua Levu.

Political System

Previously under British colonial rule, Fiji attained independence in 1970. Fiji has a bicameral Parliament, consisting of an elected House of Representatives and a nominated Senate. Based on the Westminster style of government, the House of Representatives consists of a number of parliament seats (70) which are allocated to ensure a mix of different ethnicities (37 indigenous Fijians, 27 Indo-Fijians, 1 Rotuman, 5 'others'). The Senate consists of 34 members appointed by the president (24 from the Great Council of Chiefs, 1 from the equivalent from Rotuma and 9 who are appointed by the president from other communities.

In 1987, two military coups displaced the then newly elected Labour government who had essentially won over the up till then indigenous Fijian led Alliance party. Although the leader of the Labour government was an indigenous Fijian, the Labour government was perceived mainly as being

Indo-Fijian led and the military coup ostensibly was done to place indigenous Fijians back at the helm of government. One of the consequences of the 1987 coup was the loss of membership from the Commonwealth.

A new constitution was drafted and ratified in 1990 that was slanted mainly toward the indigenous Fijians. Acceptance back into the Commonwealth depended in part on the 1990 constitution being changed and indeed, a new constitution was drafted and ratified in 1997 and 1998 respectively.

In 1999 the Labour government won once again, this time led by an Indo-Fijian. However, in 2000, another attempted coup essentially held the Labour government hostage for just over 50 days. Although it was clear that the 2000 civilian coup had some military backing, this was from a relatively small faction within the military while the rest of the military forces stood behind the constitution. The Labour government was released from their hostage situation and the hostage-takers voided their immunity by not returning their arms and munitions. A caretaker government was put in place (with only one Indo-Fijian as part of this caretaker government).

Fiji has a constitution, the third since Independence. However, the current status of the most recent constitution is rather in limbo. The attempted civilian coup in May, 2000, apparently had the constitution abrogated by the military who had taken over the running of the country having asked the President to 'step aside'. An interim government was put in place. However, a Court of Appeal in early 2001 has ruled that the last constitution still stands and is effective. This would (according to some legal experts) make the original People's Coalition Government, led by Mahendra Chaudhry, still the legal government of Fiji. However, the President has applied sections of the constitution to dismiss Chaudhry, he appointed an indigenous Fijian who promptly asked (according to the Constitution) that government be dissolved. This the President did and the predominantly indigenous Fijian caretaker government was then officially appointed as Fiji's governing body. This caretaker government was charged with preparing the country for elections in late August of 2001. Legal opinions differ but it appears as if the current Constitution is being stretched to the limit in terms of its interpretation and for the moment the indigenous cause appears to be having it's cake and eating it. Although the people who fronted the attempted coup of 2000 are not in power and the international community is (for the moment) appeased, the reality is that the democratically elected government of 1999 has been deposed and currently there is a mainly indigenous Fijian government.

As of this writing, there does not appear to be any change in strategy or tactics by the current set of politicians. As in 1999, the indigenous Fijians cannot unite, in fact there are more indigenous parties than in 1999.

Although there is currently a 'Ministry of Reconciliation', their activities have been remarkably invisible. Which does not mean that they have not occurred, but certainly the broad public are not being made aware of any significant reconciliation processes that are occurring (if they are).

Economy

The traditional Fijian economy was based on agriculture. Having completely decimated the natural sandalwood forests that Fiji had and almost eradicating the Beche-de-Mer population, sugar cane became one of the most productive crops in Fiji, particularly in the drier western sides of the islands. Preferential buying agreements with the United Kingdom ensured a higher than market driven price of the crushed sugar cane. To the North and the East, large copra plantations were started at around the turn of the 20th century. Along with gold mining, sugar cane and copra have traditionally been the largest income earners for Fiji.

In addition to agriculture, it appears that tourism currently contributes equal or greater support to the Fijian economy, as it has been developed considerably during the last few decades. Tax free zones have also recently been set up by the government to encourage the establishment of garment industries.

Recent developments have put all of these income industries at risk. First, the sugar cane industry may undergo a dramatic shift from being primarily driven by Indo-Fijian cane farmers. These cane farmers lease Fijian native owned land for periods of 30, 50, or sometimes 99 years. In the past few years many of these leases have come to an end and it appears that the indigenous Fijians would like to take their land back in order to farm the sugar cane themselves. The government's responsibility to the displaced farmers has not yet been determined, causing concern in terms of further investment in the sugar industry. Furthermore, as Europe begins helping to modernise former Eastern Bloc countries, it is clear that the favored trade agreements for Fiji are, at best, limited. Finally, Fiji Sugar Corporation has not done well at maintaining its sugar crushing mills resulting in inefficiencies and delays during every crushing season.

Second, the tourism industry has recently had a big scare with the recent political upheavals that took place in eastern Viti Levu. Although most of the tourism industry is housed in the West, tourist numbers decreased dramatically immediately following the attempted coup of 2000. Fiji recorded an economic decline in growth by 2.5% in 1998 and this is likely to have become worse because of the events of last year. The political upheaval has also led to the closure of at least one third of the garment factories with subsequent losses of jobs. It is highly unlikely that these

companies will re-open and further garment factories will most likely close due to the perceived unreliability of Fiji's economy.

Third, copra plantations that previously contributed a significant amount to Fiji's economy are now too senile to be commercially viable. Copra is at its most productive when the trees are about 35–45 years old, whereas the vast majority of Fiji's plantations are 70+ years old. Although investing in the copra industry may be a prudent component of a long-term plan for the nation, it will take many years before new trees will become economically viable or self-sustaining.

Finally the gold mines need to find new seams to mine as the cost of extraction combined with the drop in gold prices means that it not remaining cost effective. However, negotiations with landowners have now become increasingly fraught with claims and counterclaims as to who actually 'owns' the land. Recent apparent water pollution close to the mines has not eased environmental concerns about gold mining.

Historical Chronology

In approximately 12,000 BC (calibrated), the Fiji islands were first colonized by humans. However, our understanding of Fijian society is scant and more like guesswork until probably the last few hundred years. Despite being spotted by the Dutch explorer Abel Tasman in 1643 and William Bligh in 1789 as he was chased through the Fiji waters after his exile from the Bounty, no real contact was had directly with the Fijians until about the end of the 18th Century. However, in 1808, a shipwrecked sailor, Charlie Savage from the American Brigantine Eliza, came ashore along with muskets. Savage is probably solely responsible for changing the balance of power as it existed in Fiji at that time because of his superior firepower. Indigenous Fijian commentators in the 1830s were to note that Fiji had never been so violent in the previous 50 years as it was at that time.

The people to whom these comments were made were the Wesleyan Methodist missionaries, David Cargill and William Cross, who landed on 12th October 1835 in Lakeba (in the Lau group) to set up Fiji's first missonary station. By 1839, they had brought in further missionaries and started the move to Viti Levu, Fiji's largest island. In 1840, Viwa was a Christian settlement with its own chapel. In May 1840, the United States Exploring Expedition reached Fiji, spending three months in Fiji waters under the leadership of Commodore Charles Wilkes. The importance of these two apparently different institutions of western society (the church and the military) was that combined they served to convince indigenous Fijians of the paramouncy of the Western God and the Western military might. Wilkes took it upon himself (as a deterrant to further attacks on his

men) to bombard a Fijian village from his ship showing the awesome but deadly firepower of naval canons.

By 1860–1870 settlers from the US and Europe began to arrive in swarms making Levuka their home by choice. Levuka became a notorious haven for licentious behavior. It was said that ships could navigate their way through the reef's passage by the sound of gin bottles thrown in the water, making clinking sounds as they floated in the Pacific. The reason why this is important is that the belief that Fiji had a 'gentle' introduction to the value systems of the West, should not be entertained. In 1871 the first sitting of the House of Representatives, a predominantly European affair, took place establishing a postal service, currency, bank regulations and land commission.

A previous looting of an American merchant's ship led to a demand by the merchant that these goods be returned. When this was not forthcoming, it was made known that the American government would extract penalties from the Fijian people. In order to avoid this, on September 28, 1874, the Council of Chiefs gave Fiji's unreserved allegiance to Queen Victoria of the United Kingdom. On October 10th, Fiji was ceded to Great Britain. The latter in return for this made good the value of the stolen property for the American merchant. This episode is important for a number of reasons. Firstly, Great Britain was not entirely the willing colonial administrator of Fiji. They probably acquiesced because the indigenous Fijians seemed keen to cede and required no real effort on the part of the British. Secondly, annexing Fiji (and four years later Rotuma under the same administrative domain) would prevent the French, Americans, and Germans from an overwhelming colonial presence throughout the Pacific.

One year later, in 1875, Fiji's first Governor, Sir Arthur Gordon arrived from Australia. Arthur Gordon in many ways is another pivotal individual in Fiji's history. As an administrator with romantic leanings, he was keen to protect 'indigenes' from the ravages of colonization. In his governorship he enacted legislation that prevented native land from being sold to anyone (although this occurred after a percentage of land had already been 'bought' by outsiders). Today, approximately 87% of the land mass area is 'native land' which falls under the laws first promoted by Gordon. Four percent is 'freehold' which is the land 'bought' before Gordon's law (this sounds like a small percentage but of course today it sits on prime real estate) and the rest is called Crown land (i.e. government land). Native land maybe 'leased' with leases that typically start at 30 years. This is important because outside investors feel disinclined to invest in infrastructure that can be claimed back after 30 years once the lease expires.

Gordon was also instrumental in bringing in the indentured laborers from India so that the indigenous Fijians did not have to be virtual 'slaves'

on their own land. The first ship Leonidas arrived in Levuka with the first group of indentured laborers from Calcutta on May 14, 1879. In total, 87 vessels, carrying indentured laborers came to Fiji over a five-year period. Under Gordon, a separationist policy was adopted with the result that very few intermarriages between indigenous Fijians and Indo-Fijians did or have occurred since.

The first Fijian military contingent set sail for the Great War in Europe on January 1st, 1915. Although most of these men were of original European stock who lived in Fiji, the precedent was set for Fiji to be considered as part of the Great Britain's reserves of fighting men.

The Indian community could have elected representation on Legislative Council in 1929. Gold bullion was first exported from Mt Kasi in 1932 and a further three gold mines (Dolphin, Emperor and Loloma) were opened in 1934. Radio broadcasting services began in Fiji by a local subsidiary of Amalgamated Wireless (Australasia) Ltd, in 1935. Fiji managed to recruit 6500 men for the war effort of World War II who left in 1942. Modern historians cite this as being the first time that large numbers of 'commoner' Fijians were exposed to the relative freedoms of Western society (when they were not fighting the war). In other words, the possibility of living a life outside of the traditional and (for some) restrictive hierarchical village life, was lived and entertained as an alternative. The recruitment of men from Fiji into the war effort was significant for another reason in that none of the Indo-Fijian community volunteered. Their reasons were that they believed that they should receive the same pay as the British soldiers. This was refused. Regardless of the right and wrong of this pay decision, the result was that indigenous Fijians even today cite the non-participation of Indo-Fijans as a prima-facie case of exploitation of the land without commitment to being full citizens. Some sociologists cite this as being a major contributing factor to the current perceived division between indigenous Fijians and Indo-Fijians.

In 1960 the United Nations General Assembly passed a resolution defining colonial domination as repression of basic human rights. As a result, on October 10, 1970, Fiji's first Prime Minister, Ratu Kamisese Mara, received the instruments of independence by Britain's Prince of Wales, Prince Charles. This occurred 4–5 years after the United Kingdom had agreed to give Fiji its independence. One may, with the benefit of hindsight (and given recent political events), wonder if this time frame was not too quick to give Fiji sufficient training in good governance. In 1978 Fijian troops leave Fiji for Peacekeeping duties in Southern Lebanon with the United Nations Interim Forces in Lebanon. Fijian troops have in this and their subsequent UN missions been applauded by the rest of the world for their professionalism. The UN peacekeeping duties employ a substantial

number of military personnel. In part, this justifies the current size of the Royal Fiji Military Forces (RFMF). Whether this is true of all the military is not known, but there are significant members of the military who recognize the importance to the RFMF of their continued duties with the UN.

In early 1987 the Coalition NFP-FLP won the election and resulted in Dr Timoci Bavadra being sworn in as Prime Minister—the first time that an indigenous 'commoner' Fijian led the country (although Bavadra's wife is a chief). Despite key positions being held by indigenous Fijians, many people thought that the Coalition was a mainly Indo-Fijian party with Bavadra as a puppet Prime Minister. May 14, 1987 Lieutenant Colonel Rabuka, executed an ostensibly bloodless military coup, apparently to quell the unrest that had been building amongst nationalists objecting to the election of the Coalition government. Rabuka ordered an interim government to put together a government to ensure Fijian paramouncy but in September, he carried out a second coup, claiming that they were failing in their duties to indigenous Fijians. Allegations have been made about people other than Rabuka bringing about the overthrow of the Coalition government including the former President, Ratu Mara and even the CIA, but none of these allegations can be unequivocally substantiated. However, the actions of these coups were apparently two fold. First, according to analysts, Fiji was set back on the path of development 10 to 15 years. The second was undoubtedly to present to the rest of Fiji the notion that a coup d'etat is a viable solution to prevent a democratically elected government from being in power. There is no doubt in most people's minds here in Fiji that the 1987 coups set the stage for the attempted (and some would say successful) coup of May 2000.

The coup leader of 1987 became the Prime Minister and by 1995 he pushed through the appointment of a Constitution Review Commission to review the 1990 Constitution, which he had been instrumental in putting in place. Despite 8 years of affirmative action for indigenous Fijians, there appeared to be no real progress for the indigenes. In fact, some economists said that indigenous Fijians were considerably worse off than before the coup in 1987. Affirmative action became a scandal when it became public that the appalling mismanagement of funds for 'soft loans' to indigenous Fijians from Fiji's national bank left the tax payers with hundreds of millions of dollars in bad loan repayments.

Despite Fiji enjoying mass media broadcasts on radio since 1935, it was not until 1997, a full 62 years later that an official television broadcasting service began in Fiji. There had been a 'video' broadcast service in the early 1990's which was originally set up to provide coverage for the first World Rugby 7s tournament. The point being that mass media (in radio) had started relatively early but the highly persuasive power of television is relatively recent phenomena in Fiji.

The Constitution (Amendment) Bill of 1997 became law in 1998. A new preferential voting system plus indigenous Fijians splitting into numerous smaller parties and dissatisfaction with the Indo-Fijian parties that had worked with the Prime Minister to push the Constitution Reform Bill through Parliament, led to a landslide victory for the Fiji Labour Party in the national elections of 1999. Mahendra Chaudhry, a strong Union leader, as the leader of the Fiji Labour Party insisted on taking the mantle of Prime Minister, and became the first ever Indo-Fijian Prime Minister of Fiji. However, exactly one year later, a civilian takeover of the parliament buildings led to the effective ousting of the Fiji Labour Party. An Interim Government was appointed with the approval of the Great Council of Chiefs and the President, Ratu Josefa Iloilo on July 28th. Despite a Court of Appeal ruling in early 2001 that the 1997 Constitution was still valid, the former Labour and People's Coaltion Government has not been returned to power (they were effectively sacked). The interim government held elections in 2001 and the next election will be held in 2006. Results of the 2001 election gave 27.5% of the vote to the SDL or United Fiji Party. The remainder of the vote was distributed in insignificant amounts among other parties thus requiring a coalition cooperative effort (CIA, 2005).

CULTURE

Traditional Culture

There is no written account of Fijian society predating colonial contact, as Fiji had no written language. The accounts of the missionaries give an indication of pre-colonial Fijian society, since they were at the "front line" of the ethnic cultural conversion process. Fijian ethnic culture consisted of many small kingdoms each with its own "king" (Tui). In each of these kingdoms there existed chiefs (Ratu) who presided over a number of villages, each of which had their own individual chief (Wilkes, 1845; Williams, 1858). In other words, the system was mainly a feudal one. There was no 'Fijian' nationality until the self-styled 'Tui' Cakobau ceded the Fiji Islands to Great Britain in 1878. Chiefdom was inherited through the family, although sometimes there was considerable flexibility as to who in the family might become the new chief after the old one died. Absolute subservience to the chief was enforced by death. Fijian ethno-cultural belief systems often highlight the importance of the connection to the land, the so-called 'vanua.' 'Vanua' has connotations that reach far beyond the English translation of land. It is used to embrace the very essence of what it means to be 'Fijian'. One often hears of dedications being made to the 'vanua'.

Fiji's religion had similarities with other shamanic religions of the world (See Knudtson & Suzuki, 1992). There was an acknowledgement of a spiritual plane as well as a physical one. On the spiritual plane, Gods and other forces were free to travel and manifest themselves in the physical plane in any number of guises, often as objects in nature such as animals, plants or rocks. Within the Gods, there existed a hierarchy such that minor Gods could only bring about a limited set of miracles. Each province or smaller unit of Fijian society worshipped its own particular God. Temples and priests (bete) dedicated to this God were the conduit between people and the God. Suitable offerings to the God such as whales teeth (tabua), fruits, mats, pigs and cooked people were the usual payment required to bring about a good fishing harvest, rainfall or victory in an imminent war (Deane, 1921). In addition to the priests, a number of individuals (daurai) had special access to the spirit world as the equivalent of shamanic witch doctors. The priest and shaman were not necessarily the same person. People, livestock and crops could be healed or alternatively diseased. Love potions might be sought after and foretelling the future was possible. The shaman often affected these phenomena through possession by the relevant God. The shaman could also facilitate the possession of ordinary individuals by any number of different Gods. Demonstrations of the power of the Gods enabled these individuals to perform what can only be described as superhuman feats; casting themselves from great heights without apparent harm, enduring naked flames without burns and receiving lacerations without hurt or subsequent scaring (Deane, 1921).

An interesting aspect of traditional culture and access to the spirit world, was the idea that drinking kava (yaqona in Fijian) is a sacred rite that accompanies ceremony and helps the drinkers to connect with the spirit world. What this meant in traditional (pre-colonial society) was that only the chief and the priest drank yaqona. So prized was this drink that even these men drank only a single bowl for any one occasion.

Fiji is also a case study in what it means to speak or talk of 'cultural traditions'. Particularly on the notion of conversion to Christianity, this has been done with such fervor that it is impossible to hear or see anyone that practices the Fijian old style of spirituality. Whilst Christianity per se is obviously not part of the 'traditional' culture, it has been with Fiji for so long that most Fijians would not hesitate to affirm that Christianity is an inherent part of their traditional culture. Similarly, today the practice of sitting around a 'grog' or kava bowl is perceived as an integral part of what it means to be an indigenous Fijian. Although much of the pomp and ceremony has vanished, one can still see vestiges of this ceremony even in the most casual 'grog' session.

Social Changes, Forces & Impact

There is a justified concern with the erosion of traditional values being supplanted by the modern western ones, but this can lead to a negative backlash from traditionalists who use the banner of 'culture' to try and retain the status quo. This is an incorrect reading of the term 'culture' which these traditionalists are using in a static sense. This sense of the word is more strictly applied to the term 'tradition', rather than the word 'culture' which is a dynamic term. Cross-cultural social scientists are beginning to acknowledge this distinction and currently define a 'culture' in both time and space. However, the word 'culture' is, for better or worse, associated with an emotional set of values. Supporters who seek to maintain the 'culture' often deliberately use this emotional term to retain the status quo. This cannot succeed as a general strategy as time has shown younger generations will eventually replace the older ones and supplant the latter's value system (even if only somewhat). However, such sentiments may produce an impediment to positive progress for any ethnic culture and some would argue that change is inevitable. Indeed, it is an integral part of the definition of 'culture'.

A place where this can be seen most clearly is in the kerekere, system. Kerekere was a good thing in that in days of old, it was a traditional system of 'I owe you'. In times of need, you could ask for help from the extended family or close neighbors. A formal contract need not be drawn up since people rarely moved and at some point in the future, fortunes were bound to change where you could offer your help back to the same person (or someone closely related to them). This reciprocal altruism over time would iron itself out so that no one was really taken advantage of, or no one could consistently abuse the system. Another feature of kerekere in older times was that the 'value' of the favors that one could ask for and one could give were more or less the same: borrow a cooking pot; look after the children for a few days; help build a house. People from the West are amazed that there is no large-scale social welfare system in Fiji. The kerekere system is partly responsible for its absence. However, since times of old, things have changed considerably. The population is considerably more mobile. This means that the kerekere system applied in the modern context often does not work because: (i) people are not stationary enough to guarantee that favors that they have done for people will be 'returned' over time, and (ii) the 'value' of the favors is radically different if families live dispersed between urban and rural environments. So whilst a neighbor in the village may lend a kerosene lamp, this does not equate to looking after that same neighbor's children in the city, feeding, clothing and sending them to school for the year. Anecdotally, I have had conversations with a

variety of Fijians who have faced this problem. They talk about the lack of 'equity' in value in this kerekere system, in that there is an assumption that a salaried job in the city means that these urban relatives 'ought' to be paying for 'more' things anyway. When the time comes to provide the food, yaqona and mats for occasions such as funerals and marriages, relatives stream in from the village to petition the urban relatives to support this economically expensive activity. The same might happen for school fees, school uniforms or even donations made to the church. To refuse is to face ostracism from the family. The payment for such contributions from the village though might be a bundle of dalo (taro) or bele (a spinach variety) on a monthly basis. It is not that a bundle of dalo is of no cost to the village, but such a bundle is of less effort or value to 'give' for the villagers than the cash pay outs that urban relatives have to part with. Essentially kerekere is a system of old that most probably cannot be applied the way it used to be in the modern society. Kerekere misapplied may be at the root of nepotism and ultimately corrupt practices in Fiji.

Traditional practices such as providing support for the extended family can subsequently play havoc to families trying to establish themselves in urban centers. To live and work in the big city is perceived by rural relatives as having 'made it' with a commensurate salary to match this apparent success. A strategy thereafter appears to be to send one's children to the city to stay, be fed and reared by the relatives in urban settings. However, the reality of course for the urban relatives is that money is not abundant but at the same time, tradition makes it virtually impossible to deny the request of the rural family.

A family with young children or teenagers hopes that their children will do well enough academically to be awarded a place in a school in Suva. For many rural Fiji citizens, Suva is the goal. However, once in Suva, the goalposts change and the hopes and aspirations are to do well enough to be awarded a scholarship to a tertiary institution. The degree pursued is one that has immediate employment viability and especially appreciated are the degrees awarded which are recognised abroad. The goal from these tertiary institutions is thereafter to receive permanent residency abroad, in either Australia or New Zealand. Many times this is a stepping-stone (or perceived as such) to get to Hawai'i and from there, to either Canada (where many Indo-Fijians go) or the USA (which appears to be the favored end goal for indigenous Fijians). Conversations suggest that the lure to either Canada or the US is higher salaries and better employment opportunities.

Regardless of the veridicality of this mindset, the effect of this is a drain of human potential from rural areas, into the cities and from there, out of Fiji and abroad. In other words the best minds of Fiji are being systematically encouraged to move out and ultimately away from Fiji. After

the 1987 coups, professionals such as lawyers, teachers and medical doctors left the country. Although many of them were qualified Indo-Fijians, this out-migration was not confined to this ethnic group alone. Some of Fiji's most qualified indigenous people also left. As a result, under qualified personnel were appointed to key positions. Typically, these individuals fail in their duties for lack of expertise rather than goodwill, resulting in the re-appointment of these positions to ex-patriots.

Life for rural youth sent to live in urban settings can be difficult. The urban host family usually makes it clear that it resents the drain on resources by their rural 'guests'. This feeling can be quite uncomfortable and before too long, many of these youths leave the home and live as homeless 'street kids'. Their present legal means of obtaining money is to either shine shoes or push wheelbarrows around the market carrying bought food for buyers. This problem is becoming larger as time goes on as the social welfare system is under resourced to cope with this problem in an adequate manner. Currently, there does appear to be a rise in petty crime amongst these youths.

Many opportunities to increase material wealth are increased by moving towards the city. Whilst this is true in the sense of 'opportunities of contact' (greater chance of coming into contact with opportunities which may result in a paid employment), the reality is that very few migrants from rural to urban areas successfully acquire long term material wealth. Without specialized training and the 'urban mindset', urban squalor and/or ghettos are the result of a nation whose industry cannot support a skilled, semi-skilled, professional or semi-professional labor force. Fiji has neither a strong heavy or light industry to employ manual or skilled workers, nor does it have the demand for blue-collar workers in service industries with the exception of tourism. Despite that, migrants to urban areas still require a disposable income in order to live in cities. An alternative to the relatively arduous route of education, skills training and the cut and thrust of capitalist economies, is to resort to the perceived faster route of crime. The larger the division between the rich citizens and the poorer ones leads to greater the incentive to commit crime. Indeed, Fiji recently has followed this well-established sociological trend in that both the rate and severity of crime has increased dramatically in recent years. It is not inconceivable that Fiji could go the way of Papua New Guinea, particularly in places such as Suva, which might turn into another Port Morsby. Part of the reason why this has not occurred to this point is the relative dearth of guns available in Fiji. However, in the past few years, guns have started to appear in violent crimes such as robberies.

The sex work industry provides another means of earning income in urban areas. Although no empirical data are presently available as there

are surveys currently being conducted by non-governmental agencies on the matter, it is clear from anecdotal observation that there is a far more obvious bi-sexual and gay population in Fiji than in the West (obvious rather than higher frequency being the operative word here). Two issues that are just emerging in the Pacific are the transmission of sexually transmitted diseases (particularly AIDS) and an apparent increase in the pedophilia trade. Despite Fiji's very real concern with the spread of sexually transmitted diseases, the literature suggests that issues on sexuality are not openly discussed (a taboo topic) with makes effective education about STDs very difficult in the community.

Emerging Issues

The Fiji government (as are other South Pacific nations) is turning more and more to the tourism industry as their main source of income. However, the tourist market is prone to vagrancies of fashion, which is not amenable to prediction. What may be 'in' one year, may inexplicably be 'out' the next year, with absolutely no way to anticipate the sudden change. The Fiji tourism market in 1998 suffered a severe loss of Asian tourists because of the economy collapse in the Asian market. The only reason the tourism market did not appear to suffer during this year was because of a strong European market that took up the slack from the Asian collapse. If this had not occurred the tourism market would have suffered dramatically.

The more exposure that indigenous Fijians have with European ethnic cultures, the more likely it is that indigenous Fijians will take on the values of the Eurocentric culture. This is not necessarily a bad thing, but there are a few indications to proceed with caution. Modern Eurocentric ethnic culture is based on certain assumptions and has a certain history which may not sit well with the current indigenous cultures. Tourists from Eurocentric ethnic cultures generally do not have the same hierarchy of need requirements as the indigenous Fijian ethnic culture. The danger is that indigenous Fijians will learn to aspire to aspects of Eurocentric culture before they have fulfilled other aspects that might be deemed more appropriate (good governance, good schooling, effective infrastructure). Using scarce resources to buy an expensive stereo is possibly less important than spending the same money on sending children to school. Eating food out of tins, or expensive western style foods, is possibly not so important as eating natural fresh foods, particularly for growing children. Finally, tourism as a mainstream industry is likely to increase the chances of serious medical health dangers to Fiji citizens. For instance the introduction of the AIDS virus into the Fiji population.

Fiji, like any other non Eurocentric ethnic culture, faces the very real prospect of losing it's ethnic identity in favour of the invasive and seductive culture of the "West", often dressed up in the more acceptable 'forces of globalization' or becoming part of the 'global village'. This embracing of Western ideals is because of the irresistible material wealth that the West brings with it. Starting right from Fiji's contact with the West and subsequent colonization, the allure of the West has been virtually hypnotic to South Pacific islanders. Textiles whose weave is finer than anything ever produced in the South Pacific, scientific instruments and western medical practices, metal, western construction (including the sailing ships with which the Westerners arrived), and perhaps most important of all, incredible military fire-power. There thus exists a hunger for the 'west' including many aspects of the western lifestyle, which brings about the appearance or possibly by association, the notion of increased material wealth. Western clothing, fashion, dance, music, building materials, building design, electronic industries and entertainment (gambling, cinema, sports, TV, music centres) add to this appeal.

However, a western lifestyle also brings about a major change for Pacific Islanders from essentially what has been termed a communal lifestyle to a more individualistic one. The positive side of this change in lifestyle is the increase in personal freedom that any individual can enjoy, but the negative side includes selfishness, disregard for neighbors or extended family, isolation, clinical depression, urban squalor, rural decay and loss of community. Fiji citizens face a problem in that by trying to embrace the West, they may lose their own cultural roots and identity. Cross-cultural research demonstrates that one of the main ailments to people transitioning from one culture to another appears to be depression which in its extreme form can lead to violence and even suicide. One of the major contributions to this depressed state is the loss of cultural identity, usually because there is a loss of cultural 'roots' that a migrant has when they move to a new nation.

Population Growth

Fiji's population at just under 880,000 and has a growth rate of 1.4% (CIA, 2005) which translates into a doubling of the population in 45 years time. However, the population has remained relatively stable because of the out migration of Fijians (particularly in the wake of the political unrest of 1987 and 2000). However, the biggest change is in the differing age cohort proportions. Of Fiji's current population, over half are below the age of 25 years old, and a third of the current population is below 14 years old! Current estimates from the Ministry of Education suggest that there

are about 5,000 school leavers every year. However, government figures state there are only 600 jobs available every year.

Provincialism

Another emerging factor is the provincialism of Fiji. Commentators at the recent political unrest are quite clear that the apparent dissatisfaction with the Indo-Fijians is not really the issue, but rather it is the covert aspirations of power within the Fijian provinces. Pre-colonial contact apparently gave the seat of power for the provinces in the West of Fiji (especially on the big island) as is the more productive side of the island agriculturally. The arrival of ex-patriots and colonial powers from the East gave disproportionate power to the East particularly in terms of the muskets first arriving in the East. It would be fair to say that Fijians from the West feel more than a little dissatisfied with the current arrangement since the East dominates the national policies despite the current major income generators (sugar cane and tourism) being situated in the West. Furthermore, Fiji's first Prime Minister, Ratu Kamisese Mara, appears to have given (and some would say with good reason) the impression of providing favoritism to his particular province (the Lau group).

Part of the ground swell support for the 2000 coup came from a region not too far north of Fiji's capital that are economically and from the point of view of infrastructure development, far worse off than the more remote Lau group of islands. Current political unrest has brought about talk of not only the splitting up of Fiji into separate provinces and the most extreme talk has been of civil war. This is not unlike the recent situation that the Solomon Islands has experienced. The reason this does not appear to have occurred is because of the relatively unified military forces who do not appear to fractionate into provincial politics.

Health Care

Government statistics give a break down of there being 409 village clinics, 100 nursing stations, 74 health centers, 3 area hospitals, 3 nursing homes, 16 sub-division hospitals and three specialised hospitals (including a mental patient hospital). The doctor: population ratio is given as 1:2448 according to the 1992 census. The nurse: population ratio is 1:312 according to the 1996 census. The top causes of death are circulatory diseases (up 14% in the last 20 years), endocrine disorders particularly diabetes (the government claims 1 in every 8 people is affected by diabetes), cancer, respiratory diseases and accidents/injuries (for instance road toll deaths or drowing).

The current life expectancy for males is 67 years and 72 years for women. Infant mortality rate has fallen dramatically in the last 20 years (62%) to give a figure of 13 deaths per thousand births (CIA, 2005).

THE PRESENT STUDY: EPIDEMIOLOGICAL SURVEY

Although data is intended to be collected from over a thousand participants, time and resource constraints have made the collection of only 450 respondents possible at the present time. The data were all collected at the University of the South Pacific, a regional university with the main campus being on Fiji in Suva. Posters displaying a small financial payment for successful completion of the questionnaire brought about respondents. No attempt was made to distinguish completion of the questionnaire based on their ethnicity (since the university has students from all around the region). Results presented here are not analyzed separately with respect to ethnicity. However, additional analyses were conducted with a subset of Fiji citizens. Unless otherwise stated the results reflected here are virtually the same as those of the Fiji citizen class, the latter comprised of almost 73% of the population.

Participants

The sample consisted of more males (55%) than females (45%), most of whom were single (93%). Most of the respondents stated they were religious with 47% being Hindu, 4.7% being Muslim and the remainder being Christian of one denomination or another.

Results

Alcohol Use. There did not appear to be much drinking during the past 30 days (average of 1.5 times) with males becoming drunk just once and females less than half a time during this period. Nor did it appear that many people had been frequently drunk in their lifetimes (average of 6 times). Again, males appear to have been drunk more times in their lives (3 times) compared to females (twice). However, these frequencies did not include the verbal responses that 103 respondents gave (i.e., 23%) with descriptions of the number of times that they had had a drink in their lives such as: uncountable, many [times], too many [times], lots, and plenty. Nor did it include the 77 verbal descriptions (17%) for the number of times that respondents had been drunk in their lives with similar verbal descriptions as previously (i.e., frequently). It did not appear to be either easy or hard

to obtain alcohol (rating average was 4.6) and respondents did not appear to be overly concerned about their drinking habits. Males had their first drink at about 16 years of age and females a year later at 17 years old.

Tobacco Use. Just over 40% of this population said that they had smoked a cigarette. On average respondents had smoked 8 times in the past 30 days with males (10 times) more than females (6 times). The daily smoking frequency was 6.7 cigarettes a day with males smoking more per day (8.8) than females (4.1). Both males and females had their first smoke at 16 years of age.

Marijuana Use. About 18% of this population said that they had used marijuana. There did not appear to be much marijuana smoked in the last 30 days (0.3 times), which was the same for the number of times that respondents had been high from using marijuana in the last 30 days (0.3). The average frequency of marijuana usage in ones life was about 1, with males trying it 1.5 times and females on average trying it 0.5 times. The mean number of times that respondents had been high in their life from marijuana usage was less than one (0.9 times). The mean age at which marijuana was first tried was 18 years old.

Crystal Methamphetamine (Ice) Use. Ice is not readily available in Fiji. However, just fewer than 5% of the respondents did report having used it. The mean number of times ice was used it in the last 30 days (0.3), and the number of times that respondents reported being high on ice was even loswer (0.1). The average number of times that respondents had used ice in their life was also low (0.2) and the mean number of times that respondents reported being high on ice was even lower (0.1). Respondents reported that obtaining ice was difficult/very difficult (mean rating was 8.7).

Inhalant Use. Just over 10% of this population had used inhalants Respondents reported a low frequency of having used inhalants in the last 30 days (0.2), and the number of times that respondents reported being high was even lower (<0.1). The average number of times that respondents had used inhalants in their life was 0.9, and the mean number of times that respondents reported being high in their life from using inhalants was 0.1.

Kava (Iaqona) Use. Just fewer than 59% of this population said that they had used kava making this the most frequently tried substance. The average number of kava sessions held in the last 30 days was twice, with males having more sessions (2.6) then females (1.3). The average number of times respondents had been high on kava was just over 1, with males again

higher (1.5) than females (0.8). The number of times respondents had had kava in their life was 5.6 times with males having a greater frequency (7.6) than females (3.4). The average number of times that respondents had been high on kava was 2.3, with a higher frequency for males (3.0) than females (1.6). The first time respondents had kava was 16 years old. Kava was easy to get (mean rating of 3.9) with males finding it easier (3.7) compared to females (4.2).

Betelnut Use. Under 7% of the sample had used betelnut. The average number of times respondents had had betelnut in the last 30 days was low (0.3) with males having it more times (0.4) then females (0.1)). The average number of times respondents had been high from betelnut in the last 30 days was 0.8, with males again higher (1.4) than females (<0.1). The number of times respondents had had betelnut in their life was 1.6 times with males having a greater frequency (3.0) than females (<0.1). The average number of times that respondents had been high on betelnut was 0.1, with a higher frequency for males (0.2) than females (<0.1). The first time respondents had betelnut was 13 years old.

Other Substances. There were 27 responses from this population that said they used other substances in their life. The substances listed were: chemicals in laboratories, coke, deodrant, body spray, doctor's port wine, ecstasy, hairspray, herbal medicines, homebrew, thinner, kwaso, lime (coral ash) leaf, kwaso, ethylated Spirits, mushroom, speed/steroids for muscle growth, timaru, and toddy.

In the past 30 days there were 14 responses that stated they used other substances. The susbtances listed were: body spray, deodorant, bodybuilding fat bumers, coffee, homebrew, lime and leaf, mass, glucosecerin, medicinal drugs, methylated spirits, mushroom, tablets and capsules.

Violence. Almost 16% of this population said they had experience violence in the past 30 days at an average of 2.6 times, with females experiencing more violence (3.6) than males (2.0). About 19% of the respondents having done violence to someone in the last 30 days at an average of 1.8 times, with males and females roughly the same (1.7 and 2.0 respectively). About 43% of this population said they had seen violence in the last 30 days at an average of 2.1 times, with males seeing more (2.3) than females (1.9).

Almost 34% of this population said they had experience violence in their life at an average of 4.0 times, with females experiencing more violence (6.2) than males (3.0). About 30% of the respondents having done violence to someone in their life at an average of 3.0 times, with males and females roughly the same (3.1 and 2.7 respectively). About 58% of this population

said they had seen violence in their life. The average was 4.4 times, with males seeing more (5.1) than females (3.2).

Suicide. The average frequency for the number of times that respondents had thought of suicide in the past year was 0.6 times and was 0.4 times in the past 30 days. Interestingly enough there appears to be a difference between the males frequency of thinking of suicide in the past 30 days compared to the females, with males thinking of it more frequently than females (0.5 vs. 0.2). The frequency of suicide attempts was 0.1. One hundred and thirty put down a reason for contemplating suicide although of these 17 of them were admonishments NOT to engage in suicide. Of the remaining 113, most seemed to be concerned with either family pressures (high expectation to succeed particularly in scholastic achievement), or problems in partnerships such as a break up in the partnerships).

NEEDS AND RECOMMENDATIONS

For the moment, Fiji is fortunate in not having to cope with severe substance abuse problems. Most likely this is because of the relative poverty that Fiji has that an illegal drug industry could not be sustained. The most serious drugs used are alcohol, nicotine, marijuana and kava. There are reports though of an increase in the use of methylated spirits, particuarly in the rural communities, however, these are anecdotal and statistics are hard to come by.

However, what is apparent is the need for counseling skills within the region. Especially because of the interconnectedness of communal families and the extended family set, counseling targeted only at individuals is unlikely to go far. It would appear that family counseling may go along way towards helping Fijian communities to avoid issues involved in both violence and suicide. Although the university has a counseling program, the program under-resourced and there is currently no capacity to teach family counseling skills.

There are non-government organizations (particularly the churches) that are a potential contact point, however for the moment many of the churches are rather conservative and do not entertain viable discussions about such issues such as family violence, excessive substance abuse or sexual issues. There are non-religious organizations that deal with domestic violence and women's rights but these are privately funded and small scale existing mainly in Suva.

There is a temptation to perceive that the traditional indigenous culture of a developing nation is always wrong. Many Westerners focus on

nepotism, 'Pacific time', the apparent lack of adherence to standards and regulations (such as safety laws), and the use of hierarchies and 'back door' routes to achieving ends. However, one can easily neglect the positive aspects of traditional indigenous culture such as: acceptance of 'abnormal' people in small communities; a social system that appears (for the moment) to work adequately without a centralized state welfare system; flexibility in finding solutions to problems; spontaneity and a greater focus on living for the moment; a greater link to the ethnicity and identity of the past; less reliance (for the moment) on a material lifestyle.

For many open-minded people in the West, there is a renewed interest in the traditional ways of life of indigenous people. These people recognize that the current lifestyle of the West has, in the process of modernization, unfortunately lost some of its meaning and quality in life; hence this desire to rediscover the quality of life as held by many indigenous societies despite their lack of material wealth. Westerners visiting Pacific Island states away from the mainstream tourist resorts are fascinated, charmed and appreciative of the seemingly simpler and more direct lifestyle of Pacific Islanders. They experience a sort of social 'paradise lost'. It would seem ironic indeed if Fiji did not appreciate this fact and instead pursued wholesale the Western lifestyle, whilst the leading edge of social reform and experimentation in the West is trying to recapture and perhaps make a partial return to some of the lifestyle values of Fiji.

The urbanization of the West is no substitute for the economically challenged societies of the Pacific. Similarly for the West, the over-romanticized version of what they believe the Pacific Islanders have, is more to do with the popular and entertainment media of the West rather than the reality of living here. Instead, present and future Fiji citizens need to find a harmonious balance of aspects from a variety of different lifestyles that is above all appropriate to the social, environment and economic situation here in Fiji.

Considering the large population base that is classified as 'youth,' it appears that the main emphasis for Fiji ought to be to concentrate on its youth. One possibility for supporting the youth more is to set up a youth 'think tank' group, that can contribute to the increasing development of Fiji. The energy, fresh approaches and enthusiasm of the youth, even if needs to be coordinated and chaired/guided by the wisdom of an elder person, may be the best approach to addressing the very real problems that the youth of Fiji face today. This is a difficult 'solution' to adopt because for the most part, 'youth' are not typically included in decision-making. Traditionally elders make the decisions and the youth carry them out. I feel that this does not do justice to our present educational system, particularly if we are encouraging critical thinking skills. However, it should be possible to 'fuse' the exciting energy of the youth and yet instill a sense of 'respect' of

elders. What would be required is a new set of protocols that acknowledges the worth, wisdom and value of elders and yet not give the elders ultimate power to make decisions regardless of what the younger generations want or suggest. 'Think tanks' are still only a fountain of ideas. Having a range of idea does not mean that the community will adopt them.

Lastly, there is a need to begin the process of engaging in open discussions on 'ethnic identity'. If the ravages of modernization and globalization are to be avoided, Fiji citizens need to feel secure in who they are, where they have come from and where they are going in order to avoid feeling the need to 'drown' their sorrows, sink into a drug induced oblivion or try to relieve their sense of worthlessness in senseless violence.

Appendix

Selected key historical events for Fiji

c. 12,000 BC—First colonization of Fiji island by humans.

1643—Fiji islands sited by Dutch explorer Abel Tasman but no landing took place because of the apparent fierceness of the inhabitants.

1808—A shipwrecked sailor Charlie Savage from the American Brigantine Eliza and is washed ashore in Fiji. However, along with his muskets he is probably solely responsible for chaning the balance of power as it existed in Fiji probably for the best part of living memory at that time. Subsequent Fijian commentators in the 1830s were to note that Fiji had never been so violent in the previous 50 years as it was at that time.

12th October 1835 Weseleyan Methodist missionaries, David Cargill and William Cross landed in Lakeba (Lau group) to set up Fiji's first missonary station. In 1839 and started the move to Rewa then into Bau (ie Viti Levu Fiji's largest island). In 1840 Viwa was a Christian settlement with its own chapel. May 1840 The United States Exploring Expeditionreached Fiji, after spending three months in Fiji waters charting the major islands of the group under the leadership of Commodore Charles Wilkes. The importance of these two apparently different aspects of western society (the cloth and the military) was that combined they served to convince indigenous Fijians of the paramouncy of the western god and the Western military might. Wilkes took it upon himself to bombard a Fijian village from his ship showing the awesome but deadly firepower of naval canons.

1860–1870 Settlers from the US and Europe began to arrive in droves making Levuka their home by choice. Levuka became a notorious havern for liscentious behaviour. It was said that ships could navigate their way through the reef's passage by the sound of gin bottles thrown in the water, making clinking sounds as they floated in the Pacific. The reason why this is important is that any thoughts that Fiji had a 'gentle' introduction to the value systems of the West, should not be entertained.

August 1, 1871 First sitting of the House of Representatives, which was predominantly a white affair, however they managed to establish a postal service, currency, bank regulations and a land commission.

1874 A previous looting of an American merchant's ship led to a demand that these goods be returned by the merchant. When this was not forthcoming, it was made known that the American government would extract penalties from the Fijian people. In order to avoid this, on September 28 the Council of Chiefs gave Fiji unreservedly to Queen Victoria of the Great Britain. On October 10th Fiji was ceded to Great Britain, the latter in return for this made good the value of the stolen property for the American merchant.

This episode is important for a number of reasons. Firstly Great Britain was not entirely the willing colonial administration of Fiji. Probably they acquiesed because the indigenous Fijians seemed keen to cede, and annexing Fiji (and four years later Rotuma under the same domain) would prevent the French, Americans and Germans from colonising most of the Pacific.

1875 Fiji's first Governor, Sir Arthur Gordon arrived from Australia. Arthur Gordon in many ways is a pivotal single individual in Fiji's history. Acknowledged as a romantic, he was keen to protect 'indigenes' from the ravages of colonialisation. Later on in his governorship he enacted legislation which prevented native land from being sold to anyone (although this occurred after a percentage of land had already been 'bought' by outsiders. Today something like 87% of the land mass areas is 'native land' which falls under the laws first promoted by Gordon. 4% is 'freehold' which is the land 'bought' before Gordon's law (this sounds like a small percentage but of course today it sits on prime real estate) and the rest is called Crown land (ie government land).

May 14, 1879 Gordon was also instrumental in bringing in the indentured laborours from India, so that the indigenous Fijians did not have to be virtual 'slaves' on their own land. The ship Leonidas arrived in Levuka, and the first group of indentured labourers had arrived from Calcutta. All in all 87 vessels, carrying indentured labourers came to Fiji over a five year period. Under Gordon a seperationist policy was adopted with the result that very few intermarriages between indigenous Fijians and Indo-Fijians did or has occurred since.

1902 The Trans-Pacific cable linking America with Australia, and New Zealand reached Fiji, effectively making Fiji part of the global connection network which operates today in modern mass media and communications.

January 1, 1915 A Fijian contingent sailed for Europe (WWI) aboard the RMS Makura but most of these men were of original European stock who lived in Fiji. However, the precedent was set for Fiji to be considered as part of the Great Britain's reserves of fighting men.

1929 Indian community given go ahead to elect to have elected representation on Legislative Council.

1932 First gold bullion exported from Mt Kasi and in 1934 a further three gold mines (Dolphin, Emperor and Loloma) were opened. Ten years later they were producing gold valued at 15 million dollars, but of course the bulk of this did not remain or become invested in Fiji.

1935 Broadcasting services begun in Fiji by a local subsidiary of Amalgamated Wireless (Australasia) Ltd. However, it was not until 1997 (a full 62 years later) that an official television broadcasting service began in Fiji. There had been a 'video' broadcast service since 1992 which was originally set up to provide coverage for the first World 7s tournament. The point being that mass media had started relatively early but the highly persuasive power of television is relatively recent in Fiji.

1942 Fiji managed to recruit 6500 men for the war effort of World War II. Modern historians cite this as being the first time that large numbers of 'commoner' Fijians were exposed to the relative freedoms of Western society (when they were not fighting the war). In otherwords the possibility of living a life outside of the traditional and (for some) restrictive hierarchical village life, was lived and entertained as an alternative. The recruitment of men from Fiji into the war effort was significant for another reason which was that none of the Indo-Fijian community volunteered. Their reasons were because they believed that they should receive the same equivalent pay as the British soldiers. This was refused. Regardless of the right and wrong of this pay decision, the result was that indigenous Fijians even today cite the non-participation of Indo-Fijans as a prima-facie case of exploitation of the land without commitment to being full citizens. Some sociologists cite this as being a major contributing factor to the current perceived division between indigenous Fijians and Indo-Fijians.

December 14, 1960 The United Nations General Assembly passes a resolution defining colonial domination as repression of basic human rights.

October 10, 1970 Fiji's first Prime Minister Ratu Sir Kamisese Mara receives the instruments of Independence by HRH Prince of Wales, Prince Charles. This occured pretty much 4–5 years after the United Kingdom had agreed to give Fiji its independence. One may, with the benefit of hindsight, wonder if this time frame was not too quick to give Fiji sufficient training in good governance.

June 1978 Fijian troops leave Fiji for Peacekeeping duties in Southern Lebanon with the United Nations Interim Forces in Lebanon. Fijian troops have in this and their subsequent UN missions been applauded by the rest of the world for their professionalism. Modern commentators point out that the UN peacekeeping duties employs a substantial number of military personel. In part, this justifies the current size of the Royal Fiji Military Forces (RFMF). Whether this is true of all the military is not known, but there are significant members of the miliatary who recognise the importance to the RFMF of their continued duties with the UN. This may help explain why

1987 The General Election was won by the Coalition NFP-FLP, and resulted in Dr Timoci Bavadra was sworn in as Prime Minister, the first time that a 'commoner' indigenous Fijian led the country (although Bavadra's wife is a chief). Despite key positions being held by indigenous Fijians, many people thought that the Coalition was a mainly Indo-Fijian led party with Bavadra as a puppet Prime Minister. May 14, 1987 Lieutenant Colonel Rabuka, executed an ostensibly bloodless military coup, apparently to quel the unrest that had been building amongst nationalists objecting to the election of the Coalition government. Rabuka ordered an interim government to put together a government to ensure Fijian paramouncy but in September, he carried out a second coup, claiming that they were failing in their duties to the indigenous Fijians. Allegations have been made about people other than Rabuka bringing about the overthrow of the Coalition government including the former President Ratu Mara and even the involvement of the US's CIA, but none of these allegations can be unequivocally substantiated. However, the actions of these coups was apparently two fold. According to analysts, Fiji was set back on the path of development something like 10–15 years. The second is undoubtably to present to the rest of Fiji, the notion that a coup d'etat is a viable solution to prevent a democratically elected government from being in power. There is no doubt that the 1987 coups set the stage for the attempted (and some would say successful) coup of May 2000.

1995 The President under the recommendations of the by now Prime Minister Sitiveni Rabuka, appoints a Constitution Review Commission to review the 1990 Constitution. Ostensibly the reason for this push by Prime Minister Rabuka is that despite 8 years of affirmative action for indigenous Fijians, There appeared to be no real progress for the indigenes, the height of this became publich with the appauling mismanagement of funds for 'soft loans' to indigenous Fijians on their national bank. Rabuka was very strong in making the review happen and worked extensively with the leader of the Oppostiion the Indian National Federation Party. The constitution review is completed in 1996 after 14 months of consultation

July 25, 1997 The Constitution (Amendment) Bill 1997 is signed by the President and becomes law.

1998 The Constitution Amendment Act is prorogued and becomes law on July 27th. The voting system was changed to that of a preferential system instead of 'first past the post' which had operated previously. Although there was education drives to educate the Fijian population on this new style of voting, it was clear that particularly the indigenous Fijians did not understand the new voting system.

1999 The Fiji Labour Party won a landslide victory in the national elections and could have run the government on it's own based on the seats it had won. Part of the overwelming victory appears to have occured because of the incredible swing away from the Indo-Fijian National Federation Party. It appears since that Indo-Fijian voters would not vote for the party that appeared to be consorting with the 'enemy' namely Rabuka who had led the two coups in 1987. Furthermore, the indigenous Fijian parties did not stand a chance in winning since they had also split themselves into a variety of different parties. Despite the landslide victory of the Fiji Labour Party it formed the People's Coalition Party with three other indigenous Fijian parties. Mahendra Chaudhry, a strong Union leader, as the leader of the Fiji Labour Party insists on taking the mantle of Prime Minister, and becomes the first ever Indo-Fijian Prime Minister of Fiji.

2000 Civilian parliament takeover on May 19th. An Interim Government is appointed with the approval of the Great Council of Chiefs and the President, Ratu Josefa Iloilo on July 28th.

REFERENCES

Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (1992). *Cross Cultural Psychology: Research and Applications*. New York: Cambridge University Press.

Calvert, J. (Ed.). (1858). *Fiji and the Fijians: Mission history*. London: Alexander Heylin.

Central Intelligence World Fact Book (2005): http://www.cia.gov/cia/publications/factbook/geos/fjhtml

Chandra, R. (1998). Emigration. In R. Chandra & K. Mason (Eds.), *An Atlas of Fiji* (pp. 70–73). Suva: Department of Geography, University of the South Pacific.

Deane, W. (1921). *Fijian society*. London: Macmillan and Co.

Kaplan, H. B. (1999). Toward an understanding of resilience: A critical review of definitions and models. In M. Glantz & J. Johnson (Eds.), *Resilience and development: Positive life adaptations* (pp. 17–83). New York: Kluwer Academic/Plenum.

Katz, R. (1993). *The Straight Path*. Reading, Massachusetts: Addison-Wesley.

Kawachi, I., & Berkman, L. (2000). Social cohesion, social capital, and health. In L. Berkman & I. Kawachi (Eds.), *Social Epidemiology* (pp. 174–190). New York: Oxford University Press.

Knudtson, P., & Suzuki, D. (1992). *Wisdom of the elders*. St. Leonards, Australia: Allen & Unwin.

Martin, H.-P., & Schumann, H. (1997). *The Global Trap*. London: Zed Books Ltd.

Matsumoto, D. (1996). *Culture and Psychology*. Pacific Grove, CA, USA: Brooks/Cole.

Monsell-Davis, M. (1986). "It's a Man's Game"—Identity, Social Role, Social Change and Delinquency in Suva. In C. Griffen & M. Monsell-Davis (Eds.), *Fijians in Town*. Suva: Institute of Pacific Studies.

Sharpham, J. (2000). *Rabuka of Fiji*. Brisbane: Central Queensland University Press.

Stanley, D. (1993). *South Pacific Handbook*. Hong Kong: Moon Publications.

Tarte, D. (1993). *Turaga*. Suva: Fiji Times Ltd.

UNICEF, & AusAID. (2000). *Basoga ni sala—Crossroads* [Video]. Suva: Pasifika Communications.

Wilkes, C. (1845). *Narrative of the United States exploring expedition, during the years 1838, 1839, 1840, 1841, 1842*. (Vol. vol. III). Philadelphia: Lea & Blanchard.

Williams, T. (1858). *Fiji and the Fijians: The island and their inhabitants*. (Vol. 1). London: Alexander Heylin.

Wright, R., & Thompson, I. (1994). *Fiji in the Forties and Fifties*. Auckland: Thomson Pacific.

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Chapter 6

Federated States of Micronesia

Islands in the Sun

Joakim Peter and Marcus Samo

INTRODUCTION

The legacy of social problems and substance abuse in Micronesia has its roots in the long history of island contact with each other and with outsiders. Historically, the Micronesian region has been the setting for intensive and extensive complex interaction between indigenous and outsider peoples since 1521 when Spanish explorer Ferdinand Magellan made landfall in Guahan. Such interaction resulted in major changes in material, moral, health and socioeconomic cultures. As much as researchers have been studying the social problems and concurrence substance use, there is no clear and definitive answer that can lead to reliable solutions to these problems. Historically, tobacco and alcohol had been the focus of substance abuse studies, but additional awareness of new substances such as gas sniffing, tobacco chewing and betel nut have broadened the field of substance abuse research. If solutions in the form of treatment, public awareness, and policy are to be realized through research, then greater opportunity to conduct local research is needed.

Major destructive health changes were both immediate, such as the population declines from foreign-induced epidemics, and prolonged, such as health related problems resulting from substance use and abuse via tobacco and alcohol. In some cases, the health problems are the direct result of colonial governmental policy. For example, the steep decline of the Chamoru indigenous population in the early 1800's was the direct

result of the Spanish colonial government policy of forced relocation of the Chamoru populations from all of the inhabited Mariana Islands to crammed Agana, making them vulnerable to epidemics. In other cases the epidemics were induced by reckless disregard for the welfare of native populations such as the flu epidemic in the 1800's on the island of Pohnpei after an infected crew member of a whaling ship was left ashore, setting off a disastrous epidemic that killed one-third of that islands population.

With respect to prolonged health changes resulting from substance abuse, the problem has historically been caught between economic necessity and health concerns. Tobacco and alcohol were intrinsically tied into the whole trade economy as early as the contacts between whalers and foreign traders and islanders. The European, American, and later Japanese resident traders used alcohol and tobacco to attract and outright pay for island laborers. It is not surprising that when the early missionaries reported back to their home bases in the United States about the western "evil" unleashed upon the islanders by Europeans and Americans, tobacco, alcohol and resulting social ills were the main suspects. In the more modernized economies of the island nation, in which US dollars and expertise have been focused to build a private sector, tobacco and alcohol are important sources of tax dollars.

Given the complex range of issues around substance abuse, the need to establish basic foundations of quantitative data analysis in areas of suicide, mental health, and substance abuse has receive some attention (Oneisom, 1991, Marcus, 1991, Hezel, 1991a 1991b, 1992, Shewman, 1992, Dobbin, 1996). The current research project is an attempt to investigate a range of issues in substance use and behavioral risk factors among youth populations in two of the largest states of the nation of Federated States of Micronesia, Chuuk and Pohnpei.

Geography

The nation's total land area is about 271 square miles but covers over one million plus square miles of the ocean between Yap to the east and Kosrae to the westernmost part of the nation at 0 and 14 degrees North and 136–166 degrees East. FSM is comprised of over 600 atolls and islands. Pohnpei, the largest island (133 square miles) is home to the nation's capital, Palikir. The island nation is made up of a diversity of features. Chuuk State is made up of four outer island groups with another four additional regional groups of volcanic islands in the Chuuk Lagoon. Yap State current composition almost resembles its traditional *Sawei* network with strong ties between the numerous outer islands and certain villages in the main island of Yap. Pohnpei State is equally diverse with the six municipalities, which

reflect the traditional Nanmwariki system with four outer islands. Kosrae is a single island state with four municipalities.

Traditional Cultures

The cultures of the islands are now grouped together today as the Federated States of Micronesia. The three island states, Chuuk, Pohnpei, Kosrae and the outer islands of Yap are matrilineal societies, while the main island of Yap is the only island society that is patrilineal. As mentioned in another section of this paper, there is great evidence within the islanders' body of oral history that great networks existed between the island groups now know as the Federated States of Micronesia. These networks maintained both traditional lines of clan relationships and the intra-islands trade networks of the island region.

Native People

The native people of the Federated States of Micronesia were originally settled the islands around the time Jesus was alive in the Middle East about 2000 years ago. The indigenous people of Yap were believed to have settled their island much earlier, around 4,000 B.C. Although the archeological evidence is still considered very sketchy in western academic circles regarding the regional relationships and networking that predates the existing political setup of the country, there is a deep and rich body of oral tradition that supports a long history of well-organized system of networking (polities) throughout the region.

Population Demography

As of 2004, the population of FSM was slightly over 108,000. Chuuk accounts for almost half of the nation's population (53,319) while Kosrae registers the Nation's lowest total population at 7,317. Pohnpei is the second most populated with 33,692 and Yap is third with 11,178.

As of 1998, the median age for the nation is 18.7 (Table 6.1). As a matter of some interest, almost half of the Nation's population is below the age of 19.

Economy

The FSM uses US currency and the main income source for the Nation is US Compact payments, government work, fisheries, tourist and primarily subsistence agriculture. The Gross Domestic Product (GDP) is at 215.8 million.

Table 6.1. Population Summary

Age	1994	1995	1996	1997	1998
Total	105,506	107,041	108,564	110,073	111,536
<5	15,854	15,932	15,939	15,882	15,774
5–9	15,330	15,312	15,320	15,333	15,320
10–14	14,749	14,789	14,831	14,875	14,939
15–19	12,255	12,503	12,748	13,029	13,333
20–24	8,824	9,216	9,593	9,912	10,178
25–29	7,063	7,171	7,328	7,539	7,774
30–34	6,600	6,599	6,569	6,535	6,525
35–39	6,079	6,158	6,220	6,267	6,293
40–44	5,070	5,274	5,454	5,603	5,728
45–49	3,578	3,849	4,119	4,385	4,632
50–54	2,222	2,365	2,570	2,822	3,096
55–59	2,105	2,052	1,998	1,960	1,965
60–64	1,981	1,978	1,965	1,941	1,912
65–69	1,395	1,429	1,500	1,581	1,649
70–74	1,225	1,165	1,102	1,068	1,069
75–79	588	672	743	787	806
80+	588	577	565	556	543
Median		18.0	18.2	18.4	18.7

Source: Office of Planning and Statistics, FSM National Government; (June 1996): National Census Report: 1994 FSM Census of Population and Housing.

The Federated States of Micronesia (FSM) is a classic example of an experiment in modern nation building. FSM, consisting of its four states of Yap, Chuuk, Pohnpei and Kosrae; has been an independent country since 1979 in free association with the United States since 1986. The Compact of Free Association, a special 15-year treaty between the FSM and the US, has been deemed as a compromise between United States' military and strategic requirements and FSM's need for continued support. The terms of the Compact of Free Association exists in perpetuity, although some significant financial terms under Section IV expired in November 2001, the 13th anniversary of the binding agreement. In 2003, the compact was amended and renewed. Currently the two countries are attempting to renegotiate the future of the financial assistance since unemployment is high and there is overdependence on US aid.

Health Indicators

Although there is generally a worldwide epidemiological shift in major causes of death from infectious or communicable diseases to non communicable or those of chronic nature, the same cannot be said for the FSM.

Table 6.2. Major Causes of Death, by Percentage, 1991–1997

		Yap	Kosrae	Chuuk	Pohnpei	Total FSM
Adults	Diabetes	6%	24%	9%	7%	12%
	Hypertension/Heart Disease	12%	20%	26%	30%	22%
	Stroke	10%	12%	7%	11%	10%
	Chronic Lung Disease	15%	*	7%	12%	*
	Cancer	23%	16%	15%	13%	17%
	Suicide/Homicide	5%	*	5%	5%	*
	Accidents/Injuries	6%	*	7%	6%	*
Children	Prematurity	25%	38%	23%	27%	28%
	Pneumonia/Other infections	23%	22%	18%	24%	22%
	Malnutrition	*	*	23%	9%	*%
	Accidents/Injuries	9%	6%	8%	8%	8%

Source: FSM National Government, Dept. of Health, Education and Social Affairs.
* Data not available or complete.

Table 6.2 shows that while 44% of total deaths in the nation among adults from 1991–97 could be attributed to stroke, hypertension/heart disease and diabetes, pneumonia and other infectious diseases are still a high cause of death among children. Health officials still observe a mix of the two categories of illness among patients. However, it is quite noticeable that the single highest cause of death in any one year among adults during the period mention is hypertension and heart disease at 30% in Pohnpei. Among the same age group in Chuuk, hypertension and heart disease record the second highest leading cause of death in the same period. With these so-called "disease of life styles" recording double figure percentage in causes of death in Table 6.2, communicable diseased continue to be a major problem in FSM. Although these figures are dated, the problems continue unabated.

THE PRESENT STUDY: EPIDEMIOLOGICAL SURVEY

This research project involved experienced researchers who are leaders in the fields of social services and mental health in Micronesia, young student researchers, and health officials. As a result, the project truly exemplifies the spirit of interdisciplinary collaboration.

It was decided early on that the survey instrument would be modified to reflect more of the range of substances known locally in the islands. The two survey instruments (EPI and PEC) would be combined to reduce the number of data collection rounds to one. A few questions were also added after we consulted the Center for Disease Control (CDC) website where we

selected a few questions on Youth Behavioral Risk Factor which we edited to fit the local situation.

These presented a couple of challenges. The instrument would be lengthy and it would mean that some smooth and natural flow continuity in the layout of the questions in the survey instruments has to be ensured and maintained. This eventually led to an instrument that was eleven pages long. The survey instrument was reviewed in Pohnpei by Joshua Phillip, Francis X Hezel, Marcus Samo and in Chuuk by Joakim Peter, our focus groups of students and a group of data collectors.

Training

The FSM group met twice for training sessions. In October of 2000, the data collectors met for four days to train the data collectors on the questionnaires. This was held at Truk Stop Hotel with courtesy support extended by the owner, Bill Stinet, who supports treatment and research studies for substance abuse in Chuuk. The data was collected in Chuuk and Pohnpei from October 2000 to February 2001.

We returned to the same location during the first and second weeks of April 2001 to conduct training for data input for the following individuals: Carmen Sellen, our student Administrative Assistant for the project, four workstudy students: Kerly Kanto, Joyce Ann Ruben, Robert Umwech and Carlos Wichep; the data collectors from Chuuk: Johannes Berdon and Paulina Yuripi and even some volunteer two student helpers: Neise Rosokow and Merienis Maipi. Marcus Samo conducted the survey data inputing on EpiInfo. Despite scheduling difficulties and island power outages, which forced relocation of the training and the actual data inputing, the whole process was successful.

Method

Participants. There were 367 individuals, 190 males and 177 females, who filled out the self-reporting survey instrument (see Appendix A) ranging from ages 14–43 years old in two (Chuuk and Pohnpei) out of the four states (Chuuk, Pohnpei, Kosrae, and Yap) in the Federated States of Micronesia (FSM). Though the survey sites were Chuuk and Pohnpei, four out of the 367 respondents indicated they were from Kosrae, Yap and other places (Table 1). The average age was 19 years old and 17% of the total respondents were from high school, 82% from college level, and 1% with educational level other than high school and college (Table 3). More than 76% of the respondents live at home with parents or relatives and have 3.2 average number of brothers and 2.8 average number of sisters.

Table 6.3. Population Indicators for FSM States

	Yap	Kosrae	Chuuk	Pohnpei
Population	11,000	7,300	53,000	34,000
% of population less than 15 years old	41%	43%	46%	44%
Birth rate	2.9%	2.7%	3.5%	3.3%
Total fertility rate	3.7	4.2	5.6	4.3
Infant Mortality rate	3.9%	4.9%	5.3%	4.2%
Child mortality rate	1.2%	1.7%	1.8%	1.3%
Life Expectancy at birth	67	65	64	66.5
% of children fully immunized at 2 years of age	95%	95%	65%	72%

PIHOA Data Matrix 1997, and Marshall Islands Vital and Health Statistics Abstract, 1990–1994.

Ethnicity. The operational definition of ethnicity in this survey is respondent's own perception of where they are from, either from the proper part of Chuuk and Pohnpei or the outer islands. Hence, when asked how proud they are with their respective ethnic group, 74% indicated that they are very proud while only 7% said they are not proud at all.

Religious Affiliation and Practice. 57% of respondents are Roman Catholics 32% are Protestants and the rest were from other denominations such as Mormons, Seventh Day Adventists, Pentecostal, and Bahai. 35% reported they attended religious services more than once a week, 25% said 1–2 times a month, 21% once a week, 13% less than once a month, 6% indicated they never attend religious services. 66% said they are active in other social group they are involved in.

Results

Tobacco Use. Out of the 367 respondents, 273 or 75% (95% response rate) reported that they did not currently smoke cigarettes. But for those who do currently smoke, the onset age ranged from 6–22 years old with a mean age of 10.5 years. The mean age of initiated was 10.5 for males and 7.2 for females.

When asked if they smoke tobacco within in the last 30 days, 81% said they did not while less than 20% said they did. For those who said they did, individuals reported that they did not particularly like the first taste of it. As far as whether or not their parents or caretakers discouraged them from smoking, a majority of respondents indicated strong support from their parents while only 19% reported no form of support.

Frequency here means the number of different occasions on which a person smoked a cigarettes, not necessarily the number of cigarettes. Within the last 30 days, 57% reported smoking tobacco on one to five occasions. Most of them reported having easy access to tobacco, regardless of existing efforts and regulations to discourage and ban access to tobacco products by minors.

When asked who or what actions would be most helpful in stopping smoking, most respondents said that parents followed by relatives, pastors and doctors would be most influential. The use of antismoking products, however, was ranked the least. Like anything else, it is difficult to ascertain whether this is a true representation of respondents' lack of knowledge of the product or a true opinion.

Alcohol Use. The age of first drink among the respondents range from age 7 to 26. The average age of first drink was 17.2 as a whole, with 18 years old in Chuuk and 16.2 in Pohnpei. Sixty-one percent said they drank alcohol in the last 30 days. The most preferred type of drink was beer followed by hard liquor, wine, fermented yeast, tube or faluba. For those who drank in the last 30 days, respondents reported that they liked the taste and it left a strong effect on them. However, most of them reported not having ever been drunk or overly intoxicated. At least 70% indicated that their parents strongly discouraged them from drinking alcohol.

As in tobacco use above, 47% of those responding to this question drank alcohol in the last 30 days on 1–5 different occasions and 23% reported between 6–10 different occasions. The majority reported having fairly easy access to alcohol while only a fraction indicated that it is very difficult for them to obtain alcohol. Again parents are still regarded as the most influential in stopping one from drinking alcohol, followed by medical doctors, relatives and friends who do not drink (Table 6.4).

The places where drinking could occur given to the respondents as possible choices included their own homes, restaurants, on the beach, in the bar and in the car (Table 6.5). Most respondents (56%) chose friend's home as the place that they drank in the last 30 days, followed by drinking in the car (52%), in their own home and in the bar. Only 15% drank in places exposed to the public such as the restaurants. Similarly, the amount of alcohol consumed seems proportional to the location where the drinking took place such that individuals who preferred drinking at friends homes consumed a greater number of drinks than those who drank in restaurants to ranking of the places mostly drank alcohol.

When asked their reasons for drinking in the last 30 days, 70% identified going out with their friends as the main reason. 54% indicated that they wanted to relax, 48% said they drank because they did not have anything

Table 6.4. Rank order of whom or what action is most likely to make a difference?

Parents
Doctors
Relatives
Friends who don't drink
Stay away from bars
Mental health program
Sports, exercise program
Pastor/priest
Youth group activities
Counselor
Teacher
Regular friends

to do. Being angry as a reason for drinking accounted for only 26%, while receiving bad news accounted the least, 25%. Furthermore, when asked their reasons for not drinking in the last 30 days if in fact they did not drink, the following seem to be the main reasons:

- Their families were unhappy with their drinking
- Waste of money
- Bad for their health
- No money

However, religious belief, lack of money, and avoiding drinking while driving did not appear to be significant deterrents to drinking.

Respondents' perceptions of a normal drinker is someone who only drinks at party, someone who drinks and becomes quiet, and someone who drinks to relax after work. In addition, it also includes someone who drinks less than twice a week. More than half of the respondents indicated

Table 6.5. Rank order of the location where alcohol consumption occurs

Friend's home
In the car
Own home
In the bar
On the beach
In the bush
Relative's home
On campus
In the restaurant

that they are not concerned about their drinking habit but felt they should cut down because people criticize them.

Gas Sniffing. The response rate for this section was not that high as only 50 individuals completed this section. For those who filled out this section, the average age for sniffing gas is 16 years old, with Ponhpei 15.8 years old and Chuuk 16.0 years old. The ages range from 8–20 years old.

Respondents' experience with gas sniffing did not seem to have any lasting effect on them. It was done out of curiosity only. For those who did try sniffing gas, their place of usual use was on a high school campus.

Betel Nut Use. Out of the 367 respondents, 244 (91%) indicated that they have chewed betel nuts during the past 30 days. The average number of betel nuts chewed per day was 9.2 overall, 11 in Pohnpei and 8 in Chuuk. The average age when first betel nut was first used was 15.2 overall, 14.6 in Pohnpei and 15.5 in Chuuk. More than half of the time, cigarettes were added to betel nut when chewing it. In addition, respondents chewing habit was reportedly of no concern to them. Obtaining betel nuts is reportedly fairly easy in both Pohnpei and Chuuk.

Chewing Tobacco-Snuff and Skoal. Only 144 individuals reported ever using snuff or Skoal in the last 30 days, which is approximately 39% of the total respondents. Their age anges from 8–43 years old with an average age of 16-years old, with Pohnpei 15.5 and Chuuk 16.4 years old. The majority of respondents indicated that the product had a strong effect on them the first time they tried it. Again, most of the respondents reported not being concerned about their chewing habit.

Marijuana Use. At least 22% of the total subjects reported having smoked marijuana during the past 30 days. At least half of respondents have smoked at least once during the past 30 days, with the other half at least 2-5 times during that period.

With respect to lifetime use, 25% of respondents have used marijuana during their lifetime. Respondents reported having been "high" on marijuana at least once.

The Chuuk respondents indicated that it is relatively difficult for them to obtain marijuana (rating score of 7.2) while the Pohnpei respondents that it is fairly easy for them to obtain it (.2 score).

Crystal Methamphetamine ("Ice"). Out of the 367, 228 responded to this section when asking if they have ever used "ice" in the last 30 days. 98% (225) indicated that they have never used it, while only two individuals said

they have used it once in the last 30 days. When further asked how many times in their lives they have used "ice", only 15 individuals responded and only one individual said he has been high from it. Most of the respondents indicated that it is difficult to obtain "ice".

Violence. When asked if they have been the victim of physical violence in the last 30 days, 27% (99/367) indicated that they have been victims at least twice. Most of them, though, indicated that their parents were the ones that perpetrated the violence against them. Only a handful indicated that the perpetrators were other relatives and sometimes strangers. On the other hand, only 7% (27/367) indicated that the have committed an act of violence against someone else within the last 30 days, and the victims were reportedly close companions, friends or relatives.

When asked if they have carried a weapon to school in the last 30 days, only a small number (7%) said that they have in, about the same number of people who said they carried weapon also said they did not go to school because it was not safe. With respect to physical fights, at least 10% said they have been in at least three physical fights within the last twelve months.

Suicide. When asked how many times within the last 12 months respondents have thought about taking their own lives, 21% said they have thought about it at least once, 8% said at least 2–5 times, with only three individuals saying 11–15 times. When asked for the last 30 days, hat number doubles to 16%. Out of 103 who responded to how many times they have attempted suicide, 71(19%) indicated that they have tried it once, 17 individuals said they have tried it 2–5 times, and nine individuals at least 21 times.

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Appendix A

Chronology of Historical Events

Time Period	Events
1656	Spanish Captain Arellano visits Chuuk, first recorded contact between European and Chuukese/Pohnpeian
1795	Captain Mortlock "discovers" the Mortlock Islands in Chuuk
1824–38	French expedition to colonies- Duperry and Dumont d'Urville
1840–60	Whaling era in Colonies
1852	Protestant missionaries begin mission work in Pohnpei and Kosrae
1874	Protestant missionaries begin mission work in Chuuk
1870's	Copra trade begins in Micronesia
1886	Formal Spanish rule begins in Carolines—Catholic mission begins
1899	German rule begins in the Caroline islands
1905–1907	Great typhoons: Pohnpei, Mortlocks, Woleai; Sokehs warriors uprising against Germans in Pohnpei
1911	First Catholic missionaries in Chuuk
1914	Japan took over the Micronesia
1928	Okinawan fishermen come to Chuuk and Pohnpei
1940	Japanese militarization of Micronesia begins
1945	World War II ends
1947	Trust Territory of the Pacific Islands (TTPI) is established under the United Nations-US Navy Rule period
1951	TTPI is transferred to civilian administration under the Department of Interior
1963	Solomon Report: Kennedy policy of rapid change
1965	Congress of Micronesia
1969	Negotiations for future political status for Micronesia begins
1974	Foreign investment allowed in Micronesia
1975	Federated States of Micronesia Constitutional convention
1979	Beginning of self-government. Capitol of FSM moved to Palikir, Pohnpei
1986	Compact of Free Association implemented
2003	Compact amended and renewed

REFERENCES

Center for Disease Control and Prevention (CDC) Web Page: *http://www.cdc.gov/.*
Dobbin, J. (1996) Drugs in Micronesia *Micronesian Counselor* 18.
F.S.M Telecom Web Page: *http://www.fm/.*
Hezel, F. (1991) What We Can Do to Prevent Suicide *Micronesian Counselor* 5.
Marcus, M. (1991) Child Abuse and Neglect in Micronesia *Micronesian Counselor* 2.
Marijuana in Chuuk *Micronesian Counselor* 2.
Mental Illness in Micronesia *Micronesian Counselor* 9.
Oneisom, I. (1991) Chuuk's Violence: Then and Now *Micronesian Counselor* 1.
Shewman, R. (1992) Neglect, physical abuse, and sexual abuse in Palau *Micronesian Counselor* 7.
Yano, V. (1998) Health Talk with Dr. Victor Yano. *Chuuk kampas nius* 2, 1–3.

Chapter 7

Guam

Caught Amidst Change and Tradition

Juan Rapadas, Mamie Balajadia, and
Donald Rubinstein

INTRODUCTION

The need to study social problems in our society is compelling. The social toll of drug and alcohol abuse, tobacco use, violence and suicide in our society is immeasurable. Millions of dollars are spent for court costs, lawyers, corrections, and for treatment programs. The social and economic costs of these problems are devastating and many unanswered questions still remain about the causes of these social ills and how society can address them.

Research is needed to address basic questions concerning these issues. Studying major social problems must start at a basic quantitative level of understanding in order to make educated guesses and interpretations about why the problems associated with these social ills exist what can be done about it. This investigation seeks to examine basic questions about tobacco, alcohol, and drug use, as well as the occurrence of violence and suicide in the island of Guam, the westernmost territory of the United States in the Pacific Ocean.

Guam is the largest and southernmost island of the Marianas Archipelago, which is part of the larger Oceania region called Micronesia. Guam is the Westernmost possession of the United States, and has been since 1898. The island is approximately 6,000 miles west of San Francisco; 3,700 miles west-southwest of Honolulu: 1,500 miles southeast of Tokyo;

1,500 miles east of Manila: and 3,100 miles northwest of Australia. Its official global location is 13 degrees North latitude and 144 degrees East longitude.

Geography

The island of Guam is approximately 30 miles in length with variable width, ranging from 12 to 4 miles at its narrowest point. The largest island in Micronesia, Guam has a total landmass of 212 square miles. Shaped like a footprint, Guam was formed by the union of two volcanoes. The island has two basic geological compositions. Two-thirds of Guam, the central and northern features are primarily raised limestones with several volcanic formations at Mount Santa Rosa and mount Mataguac. The northern cliff lines drop precipitously into the sea with an elevation ranging from 300 to 600 feet. The southern features are basically volcanic with an elongated mountain ridge dividing the inland valleys and coastline. The highest point is Mount Lamlam with an elevation of 1,334 feet.

Population Demography

During the last census in 1990, there were 133,152 people on Guam. It is projected to reach 167,292 after the census 2000 numbers are done but preliminary numbers only show a population estimate of about 144,500 which is a small increase. Anecdotally, it is believed that for every one family that moves to Guam, seven families move off-island because of the lack of good-paying jobs and poor basic infrastructure (power, water, and medical facilities). In the 1990 census, Native Chamorros and part Chamorros made up 43% of the population, Filipinos made up 23%, and 15% of the population are Caucasians. Koreans, Blacks, Chinese, Japanese, Chuukese, Palauan, and RMI each made up 3% or less. Populations from the Freely Associated states of Micronesia (Chuuk, Pohnpei, Kosrae, and Yap), Rebublics of Belau, and the Marshall Islands may indicate major increases when the 2000 census numbers are completed.

Native People

The ancient Chamorros, the earliest known inhabitants of the Marianas Islands (Guam, Saipan, Rota, and Tinian), were of Mayo-Polynesian descent originating from southeast Asia as early as 2,000 BC. Through linguistic, archaeological, and historical evidence, the cultural similarities of the ancient and the present day Chamorros resemble the languages and cultures of Malaysia, Indonesia, the Philippines and other parts of Micronesia.

Basic Economy

In March 1998 there were a total of 69,140 total workers on Guam. About 16,430 were Government of Guam workers, 5,130 were Federal, and 47,580 were in the private sector. As a contrast, in March of 2000 there were only 58,330 total workers, which is a decrease of almost 19%. Federal jobs decreased to a total of 4,410, the private sector decreased to 41,180 and Government of Guam jobs decreased to 12,740.

Most of Guam's economy is tourist driven as evidenced by the large number of service and retail jobs. Total tourists in 1996 were 1,352,361 while in 1999 there were 1,155,517. These statistics reflect an economy that has suffered and declined along with most of the Pacific Islands and other Asian regions.

The US military was a positive economic presence for many decades on Guam. Recently, because of the Asian downturn in the economy and the Federal/military downsizing Guam's economy has suffered tremendously. There are little to no significant agricultural or fishing businesses that seriously impact the Guam economy as a whole. The largest employer is the Government of Guam, followed closely by service-related businesses like hotels, restaurants, and retail.

Social Indicators

Total household USDA food stamp usage in 1989 was 3,233, in 1999 it was 5,874. welfare in 1989 was $7,319,226 in 1998 it was $27,257,445 which show a tremendous increase in the need for public assistance. There were 636 felony filings in 1997 and 946 in 1998, 1,534 misdemeanor filings in 1997 and 2,011 misdemeanor filings in 1998. Delinquent crimes in 1997 were 268 and in 1998 were 502. There was a 40% rise in DV cases referred to court counseling from 1998 to 1999. These statistics illustrate significant increases in criminal activity just within a period of one year.

Figure 7.1 displays the significant rise in suicide attempts and the steady overall increase in completed suicides over the last 13 years. These figures were culled from data provided by the Public Health and Social Services. Although Guam has seen an increase in population over the last 15 years, the population on Guam has not had increases like those seen in actual suicides and suicide attempts. For example, in 1985 there were 11 deaths by suicide and in 1999 there were 37 death which represents an over 3 and ½ increase. There has not been a threefold increase in Guam population for the same time period.

An increasing trend in offenses and domestic violence was observed on Guam from 1993 through 1997. During the same period, a very close

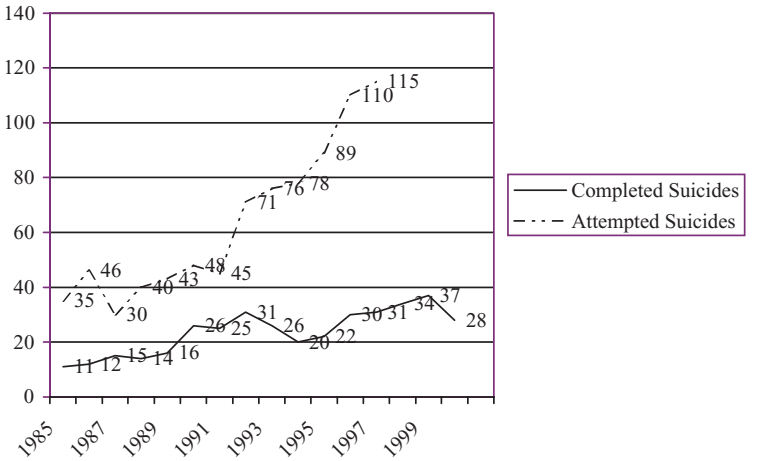

Figure 7.1. Completed Suicides and Attempted Suicides on Guam from 1985–1998.

association between the use of drugs and alcohol and family violence was also observed by the Guam Police Department.

Forces of Change and Impact

Guam's database on these problems is not well developed. There have been few organized and systematic efforts from public or private entities to collect data that can inform, direct, and guide public and private agencies toward policies and programs for troubled youth and their families. Under the best of circumstances, it is hoped that this study will help to create fuller understanding of these problems and to offer practical solutions and recommendations for consideration by policy makers and government leaders.

Guam, an unincorporated U.S. territory since 1898, is a Pacific Micronesian island undergoing rapid economic and social changes. This data-gathering endeavor is ideal for Guam because the rapid pace of modernization has had a major impact on Guam society, especially vulnerable populations like the elderly, mentally retarded, and the youth. Rampant crime, drug addiction, family violence, suicide and child abuse can signal major problems in a population of people undergoing rapid socioeconomic changes. Studying and understanding these problems in a small community such as Guam may help us make generalizations about Guamanian society, Micronesian society, other Pacific Island communities, and even American culture. This investigation represents one of a few studies that has incorporated substance abuse, violence and suicide. It is unique because it features an Asian-American and Pacific Islander sample of subjects

that are often excluded from national American studies owing to the small percentage of these people in the United States (Cheung & Snowden, 1990; Fong & Mokuau, 1994; Iijima-Hall, 1997).

The present investigation specifically focused on a small sample of surveys collected from youth and young adults in Guam. There are a number of recent compelling conceptual, and contextual events that are important to consider when interpreting data collected (See Appendix).

These social and economic events may be associated with rapid social change, class disparity, increased wealth for few, an increase in poverty, family disintegration, violence, racial and class separation, population growth, taxing of environment and resources, pollution, increase in perception of problems, and increased awareness of social problems (Levi & Andersson, 1975). This can lead to significant decline in quality of life in all levels of Guam's society unless some cooperative and collaborative efforts are begun to address these problems in a multilevel, multi-system approach.

In the late 1980's and through the early 1990's, Guam's boom was unprecedented and many of Guam's people prospered. However, through the late 1990's, Guam's economy experienced major problems due to the recession in Asia, and downsizing of the U.S. military in the entire region. There have been small signs of a slight recovery, but Guam is currently suffering through its highest unemployment rate, record number of bankruptcies, loan foreclosures, increased drug use and an overall rise in crimes against persons and property over the last five years as noted in the official Government of Guam website. For a fuller and complete review of Guam's history from pre-European contact through today see Appendix A.

Traditional Cultural Under Siege

Since the beginning of post-European contact in 1521, traditional Chamoru culture on Guam has been under "siege". The Spanish, Japanese, and the United States at one time or another, deliberate or not, have created and instituted policies that amounted to cultural genocide. Through disease and war, the Spanish was successful in drastically decreasing the Chamoru population on Guam from 100,000 to only several thousands. There are no "pure" Chamorus alive and it is unclear when the last one died but it is estimated to be probably sometime in the 18th or 19th century. Chamoru language, as it is spoken today differs dramatically from the original, traditional Chamoru that was spoken centuries ago. Today's language is a bastardization of Spanish and possibly other Asian or Micronesian languages. As an example, counting one to ten in today's Chamoru, which sounds suspiciously similar to Spanish, is markedly different than older, traditional Chamoru language.

Original Chamorus probably practiced some type of naturalistic religion. Christianity replaced it and over 90% of the population on Guam today is some type of Christian, mostly Catholic. The nature-based spiritual practices have since disappeared. Today, many Chamoru cultural and religious practices that are considered Chamoru were actually borrowed directly from Spanish, Filipino, or other Asian traditions. Many Chamoru foods have their origin in Spanish or Southeast Asian traditions. Today, in many hotels, there are "Chamoru" dance troupes dancing Polynesian style and passing them off as local dancing. Finally, the matrilineal system that existed for centuries before the Spanish arrived was systematically dismantled and replaced by the Judeo-Christian patriarchal system. This fundamental shift in social philosophy has forever changed Guam's history and still reverberates through all of Guam's people, centuries later.

HEALTH CARE SYSTEM

Public Health Care System

The Public health care system, administered by Government of Guam, is comprised of three major agencies tasked to provide a comprehensive range of health services to the people of Guam. The Guam Memorial Hospital Authority is mandated to provide acute hospitalization and emergency care. The Department of Public Health and Social Services is mandated to provide community primary health care, and the Department of Mental Health and Substance Abuse is mandated to provide comprehensive community mental health and substance-related disorders programs and services. The following data is from the DMHSA intake records for FY 2001 (October 1, 2000 to May 31, 2001):

- 54% individuals seeking services at DMHSA are for drug and/or alcohol problems. Of the 54%, 88% are adults and 12% are children or adolescents.
- Court ordered intakes for drug and alcohol assessments showed—
  21% for family violence
  35% for DUI
  36% for possession of controlled substance
  08% for other offenses
- 19% individuals seeking service at DMHSA are for suicidal ideation or attempt or gesture.
- For ages 14–25 there were 139 individuals seen for suicidal ideation, attempt or gesture and of those individuals 74% were female and 26% were male.

THE PRESENT STUDY: EPIDEMIOLOGICAL SURVEY

This study is part of a larger epidemiological monitoring study that is being funded through a grant from the Center for Substance Abuse Treatment, SAMHSA. Eight Pacific Island nations or countries have agreed to participate in this study, which measures the occurrence of tobacco, alcohol and drug use as well as the occurrence of violence and suicide. The same survey was used throughout the eight Pacific Island sites. The purpose was to collect comparative data across all islands and regions of study, to create a collaborative dialogue between nations, and to work together to form solutions to these devastating social problems.

Method

Participants. There were approximately 148 youth and young adult participants in the survey ranging from ages 13 through 25. Table 7.1 shows the ethnic breakdown of survey respondents. Females comprised 59.6% of the sample (n = 87) and males comprising 40.4% of the sample (n = 59). Eighty-eight percent of the sample reported being Catholic. Four percent reported being Protestant and one percent reported being Jehovah's Witness. There were also 129 other survey participants who did not fall into the age range which will be analyzed later for comparison. In addition, there is an expected increase in data collection coming from the Department of Education, the University of Guam, and the Department of Youth Affairs which will be added to the current numbers, tables and figures.

Table 7.1. Percentages of Top Six Ethnic Categories for Respondents in the Study

Ethnicity	n	%
1) Chamoru	56	37.8
2) Filipino	42	28.4
3) Chamoru/Filipino	17	11.5
4) Chamoru/Caucasian	12	8.1
5) Chuukese	4	2.7
6) Chamoru/Japanese	4	2.7
All Others	13	8.8
Total	148	100%

Note. The other categories listed in order are "others", Caucasian, Chamoru/Korean, Chamoru/Hawaiian, Palauan, Yapese, Hawaiian, and Filipino/Chinese.

Survey Instrument. The instrument was designed for the larger epidemiological monitoring study. The survey was changed in specific areas to fit the specific population of Guam and to make it easier to complete.

Results

Alcohol Use. For this sample of 148 respondents, 65% stated that they had not drunk any alcohol in the last thirty days and 4.1% of the respondents left the question blank. Almost 24% had drank alcohol between one and five times in the last thirty days, 4.1% drank between six and ten times, 0.7% or one respondent drank between eleven and fifteen times, 2.0% drank twenty-plus times, 0.7 or one respondent wrote down words to describe an excess amount such as "too many to count".

When asked how many times they were drunk or high in the last thirty days, for this sample of 148 respondents, 78% stated that they had not been drunk or high from alcohol in the last thirty days and 5.4.% of the respondents left the question blank. Almost 12.2% had drank alcohol between one and five times in the last thirty days, 1.4% drank between six and ten times, 0.7% or one respondent drank between eleven and fifteen times, 1.4% drank twenty-plus times, 0.7 or one respondent wrote down words to describe an excess amount such as "too many to count" and 0.7 or one respondent wrote words to describe a small number of times such as "not much".

When asked to estimate the number of times in their entire life that they drank alcohol, 34% said they never drank and 6.8% did not answer the question. The same percentage (6.8 or 10 respondents) wrote words to describe an excess amount such as "too many to count" and two respondents or 1.4% of the sample wrote words to describe a small number of times such as "not much". This left a remaining 51% of respondents stating they have drunk alcohol a specific number of times in their lifetime ranging from 1 to 10 times (25%), 11–20 times (6.8%), 21–30 times (4.7%), 31–40 times (2.7%), 41–50 times (3.4%), 71–80 times (1.4%), 91–100 times (3.4%), and 100+ times (4.1%).

When asked to estimate the number of times in their entire life that they were drunk or high from alcohol, 47% said they never drank and 7.4% did not answer the question. Another 8.8% or 13 respondents wrote words to describe an excess amount such as "too many to count" and two respondents or 1.4% of the sample wrote words to describe a small number of times such as "not much". This left a remaining 35.4% of respondents stating they have gotten high or drunk from alcohol a specific number of times in their lifetime ranging from 1 to 10 times (26.4%), 11–20 times (6.8%), 21–30 times (2.0%), 41–50 times (2.0%), 71–80 times (0.7%), and 100+ times (3.4%).

The data on the first time ever drank alcohol question shows that 53.2% of those who responded to this question (109 total) had their first drink between the ages of 13–17. About 29.4% were age 12 and under when they drank their first alcoholic beverage. The remaining percentages are 16.5% for age group of 18 through 24 and 0.9% were age 25 through 29. The average age when this sample first drank alcohol was 14.3 and the median age was 15.

It was very easy for 42% of this sample young people to obtain alcohol. In contrast, for 11.3% of this sample it was very difficult to obtain alcohol while 13.5% of this sample said it was neither very easy nor very difficult to obtain alcohol. The mean for this question was 3.3 with a standard deviation of 2.95. For this sample, almost 60% of the sample stated that alcohol does not cause problems while a little over three percent stated that alcohol causes a lot of problems. The mean for this question was 2.3 with a standard deviation of 2.37. These two questions used a ten-point scale.

Tobacco Use. For this sample of 148 respondents, 60% stated that they had not smoked a cigarette in the last thirty days and 4.7% of the respondents left the question blank. Over 10% had smoked a cigarette between one to five times in the last thirty days, 3.4% between six and ten times, 2.0% or three respondents smoked a cigarette drank between eleven and fifteen times, 11.5% smoked twenty-plus times, 8.1% or twelve respondents wrote down words to describe an excess amount such as "too many to count".

For this sample of 148 respondents, 63% stated that they had not smoked a cigarette in the last thirty days and 5.4% of the respondents left the question blank. Over 15% had smoked one to five cigarettes per day in the last thirty days, 3.4% smoked six to ten cigarettes per day in the last thirty days, 1.4% or two respondents smoked eleven to fifteen cigarettes per day in the last thirty days, almost 10% smoked twenty-plus cigarettes per day in the last thirty days, 2.0% or three respondents wrote down words to describe an excess amount such as "too many to count".

For this sample of 148 respondents, 89% stated that they had not used smokeless tobacco in the last thirty days and 8.1% of the respondents left the question blank. Only one respondent or 0.7% had used smokeless tobacco between one to five times in the last thirty days, between six and ten times, and between eleven and fifteen times. Two respondents or 1.4% used smokeless tobacco "too many times" in the last thirty days.

The data on "the first time ever smoked a cigarette" shows that 44% of those who responded to this question (89 total) had their first cigarette at the age of 12 and under. About 52% of the 89 who answered this question were

age 13 through 17 when they first smoked a cigarette. Three respondents first smoked a cigarette between the ages of 18 and 24. The average age when this sample first smoked a cigarette was 12.7 and the median age was 13.

The data on "the first time ever used smokeless tobacco" shows that 69% of those who responded to this question (16 total) first used smokeless tobacco at the ages of 13 through 17. About 19% of the 16 who answered this question were age 12 and under when they first used smokeless tobacco. The remaining percentage was 12.5 or two respondents first used smokeless tobacco between the ages of 18 and 24. The average age when this sample first used smokeless tobacco was 12.9 and the median age was 14.

Marijuana or Hashish Use. For this sample of 148 respondents, 79% stated that they had not used marijuana in the last thirty days and 4.7% of the respondents left the question blank. Almost 9.0% had used marijuana between one and five times in the last thirty days, 2.7% used marijuana between six and ten times, 1.4% or two respondents used marijuana between eleven and fifteen times, 0.7% or one respondent used marijuana between sixteen and twenty times, and 2.7% or four respondents used marijuana twenty-plus times.

When asked how many times they were high from using marijuana in the last thirty days, for this sample of 148 respondents, 78% stated that they had not been high from using marijuana in the last thirty days and 6.8% of the respondents left the question blank. Almost 9% had been high on marijuana between one and five times in the last thirty days, 2.7% were high from using marijuana between six and ten times, only 0.7% or one respondent was high between eleven and fifteen times and between sixteen and twenty times, 2.7% or four respondents used marijuana twenty-plus times in the last thirty days.

When asked to estimate the number of times in their entire life that they used marijuana or hashish, 59% said they never used marijuana and 6.1% did not answer the question. Fifteen or 10.1% of respondents wrote words to describe an excess amount such as "too many to count" and one respondent or 0.7% of the sample wrote words to describe a small number of times such as "not much". This left a remaining 24.1% of respondents stating they have smoked marijuana a specific number of times in their lifetime ranging from 1 to 10 times (11%), 11–20 times (4.1%), 21–30 times (1.4%), 31–40 times (0.7%), 41–50 times (0.7%), 51–60 times (0.7), 81–90 times (0.7%), 91–100 times (0.7%), and 100+ times (4.7%).

When asked to estimate the number of times in their entire life that they were high from using marijuana, 57.4% said they never got high from marijuana and 6.8% did not answer the question. Another 9.5% or 14

respondents wrote words to describe an excess amount such as "too many to count". This left a remaining 26.4% of respondents stating they have gotten high from using marijuana a specific number of times in their lifetime ranging from 1 to 10 times (12.2%), 11–20 times (3.4%), 21–30 times (1.4%), 31–40 times (1.4%), 41–50 times (1.4%), 51–60 times (0.7%), 81–90 times (0.7%) and 100+ times (5.4%).

The data on the first time ever used marijuana question shows that 64% of those who responded to this question (63 total) had first used marijuana between the ages of 13–17. About 20.6% were age 12 and under when they first used marijuana. The remaining percentages are 11.1% for age group of 18 through 24. One respondent used words to describe low usage such as "not much". The average age when this sample first smoked marijuana was 14.1 and the median age was 15.

For those who answered this question (119 total), it was very easy for 24% of this sample to obtain marijuana. In contrast, for 24% said it was very difficult to obtain marijuana while 8.4% of those who responded to this question said it was neither very easy nor very difficult to obtain marijuana. The mean for this question was 5.0 with a standard deviation of 3.64. This question used a ten-point scale to measure the ease and difficulty in obtaining marijuana.

Crystal Methamphetamine ("Ice") Use. For this sample of 148 respondents, 92% stated that they had not used ice in the last thirty days and 6.8% of the respondents left the question blank. Only 1.4% of the sample or two respondents had used ice between one and five times in the last thirty days.

When asked how many times they were high from using ice in the last thirty days, for this sample of 148 respondents, 91% stated that they had not been high from using ice in the last thirty days and 7.4% of the respondents left the question blank. Almost 1.4% of the sample or two respondents were high on marijuana between one and five times in the last thirty days.

When asked to estimate the number of times in their entire life that they used ice or hashish, 77% said they never used marijuana and 8.1% did not answer the question. Seven or 4.7% of respondents wrote words to describe an excess amount such as "too many to count". This left a remaining 10.2% of respondents stating they have used ice a specific number of times in their lifetime ranging from 1 to 10 times (6.1%), 41–50 times (1.4%), 91–100 times (1.4%), and 100+ times (1.4%).

When asked to estimate the number of times in their entire life that they were high from using ice, 77% said they never got high from ice and 8.1% did not answer the question. Another 4.1% or 6 respondents wrote

words to describe an excess amount such as "too many to count". This left a remaining 10.8% of respondents stating they have gotten high from using ice a specific number of times in their lifetime ranging from 1 to 10 times (6.1%), 31–40 times (0.7%), 41–50 times (0.7%), 71–80 times (0.7%), 91–100 times (0.7) and 100+ times (2.0%).

The data on the first time ever used ice question shows that 80% of those who responded to this question (25 total) had first used ice between the ages of 13–17. About 4.0% or one respondent was age 12 and under when they first used ice and three respondents (12.0%) were between the ages of 18 and 24. The average age when this sample first used ice was 15.8 and the median age was 16.

For those who answered this question (111 total), it was very easy for 16.2% of this sample to obtain ice. In contrast, for 45% said it was very difficult to obtain ice while 10.8% of those who responded to this question said it was neither very easy nor very difficult to obtain ice. The mean for this question was 6.4 with a standard deviation of 3.9. This question used a ten-point scale to measure the ease and difficulty in obtaining ice.

Inhalant Use. For this sample of 148 respondents, 89% stated that they had not used inhalants in the last thirty days and 8.8% of the respondents left the question blank. Only 1.4% of the sample or two respondents had used inhalants between one and five times in the last thirty days and one respondent used inhalants between six and ten times in the last thirty days.

When asked how many times they were high from using inhalants in the last thirty days, for this sample of 148 respondents, 89% stated that they had not been high from using inhalants in the last thirty days and 8.8% of the respondents left the question blank. Almost 1.4% of the sample or two respondents was high on inhalants between one and five times in the last thirty days and one respondent used inhalants between six and ten times in the last thirty days.

When asked to estimate the number of times in their entire life that they used inhalants, 81% said they never used inhalants and 8.8% did not answer the question. Two or 1.4% of respondents wrote words to describe an excess amount such as "too many to count". This left a remaining 8.7% of respondents stating they have used inhalants a specific number of times in their lifetime ranging from 1 to 10 times (8.1%) and 81–90 times (0.7%).

When asked to estimate the number of times in their entire life that they were high from using inhalants, 84% said they never got high from inhalants and 8.8% did not answer the question. Another 1.4% or 2 respondents wrote words to describe an excess amount such as "too many to count". This left a remaining 6.1% of respondents stating they have

gotten high from using inhalants a specific number of times in their lifetime ranging from 1 to 10 times (5.4%) and 81–90 times (0.7).

The data on the first time ever used inhalants question shows that 53% of those who responded to this question (17 total) had first used inhalants at age 12 and under. About 41.2% or seven respondents was between the ages of 13 and 17 when they first used inhalants. The average age when this sample first used inhalants was 12.6 and the median age was 12.

Eleven respondents (7.4% of 148) admitted to using betel nut in the last thirty days. The same percentage admitted betel nut in their lifetime and three respondents or 2.0% of 148 respondents admitted to drinking tuba or fermented coconut milk in their lifetime. Betel nut users were about 11.21 years old when first used betel nut with a median age of 11 and a standard deviation of 4.27. Tuba drinkers were 13.6 years old when first drank tuba with a median age of 13 and standard deviation of 3.90.

Violent Behavior. This section was divided in two ways. It asks the respondent about current violent behaviors and lifetime occurrence of violent behavior. Almost 12% or 17 of the 148 respondents were victims of physical violence in the last thirty days. Of those who said they were victims of violence in the last thirty days, strangers were the most stated perpetrator, followed by other relatives and then by a parent. The lifetime percentage of being a victim of violence was 29.1% or 43 of the 148 respondents. From that number, many were victimized by their own parent(s), followed by strangers, other relatives, boy/girlfriends, and classmates.

In the last thirty days, 16.2% of all 148 respondents committed an act of violence toward another person. Violence was directed to mostly relatives other than parents and siblings, strangers, friends, and parents were the most named victim of violence. For lifetime commission of violence, almost 39% or 57 of the 148 respondents perpetrated violence upon others. The victims usually were strangers, boy/girlfriends, parents, other relatives, classmates and friends were victimized in a lifetime.

About 20% or 30 of the 148 respondents stated that they witnessed an act of violence in the last thirty days. The most frequently named victims were strangers, other relatives, parents, classmates, and friends. For lifetime witnessing of violence, 53.4% or 79 of the 148 respondents say they have witnessed an act of physical violence and strangers, parents, classmates, and other relatives were the top four stated victims as witnessed in a lifetime.

Suicidal Behavior. Almost 38% or 56 of the 148 respondents had thoughts of committing suicide in the last year and over 2/3 of those thought about it three times or less while on the other side of the continuum,

6 respondents or 11% of those who had thought of suicide in the last year said they thought about "too much" or "countless times".

About 19% or 28 of the 148 respondents had thoughts of suicide only in the past 30 days. Almost 64% of those thought about it three times or less and only 2 individuals said they thought about suicide "countless" times in the past thirty days.

Almost 24% or 35 of all 148 respondents in this survey have attempted suicide. As with the previous questions 2/3 of those attempting suicide, tried it three or less times and only three said "too numerous to count".

Finally, over 40% of the 148 respondents or 60 total delineated reasons why they had thought of or attempted suicide. The following are some of the reasons: "I just wanted to die", "depressed, feeling of frustration and no future", "sadness, unworthiness, unacceptance, revenge, anger", "stress, money, life", "I realized that I had no power, A white American discriminated me", "I hate life and I didn't want to go to DYA", "My best friends are gone", "problems at school, relationship problems", and "family problems, social problems."

DISCUSSION

The basic aim of this study was to measure the occurrence of tobacco, alcohol, drug use violence, and suicide in a teen and young adult sample on Guam. This discussion section is not an exhaustive exploration into all the tables generated by the data, but rather it is a selected review and interpretation of particular findings that seemed to reveal some important and essential information about Guam's overall population.

Will the following numbers and percentages tell the true story of the usage and occurrence of these social problems on Guam? The numbers do not adequately tell enough to make definitive conclusions because underlying these findings, is a society that is suffering, a society that is struggling to maintain its identity and culture amidst the rapid social, regional, and global changes occurring. Upon first glance, the numbers and statistics cannot tell the whole story and one would be hard-pressed to conclude, definitively, that Guam is in crisis just by looking at the percentages. Taken together, and considering the context of Guam and its place in time and history, these findings tell a tragic story of a people and an island that is struggling to survive amidst rapid changes that have undermined historical and cultural foundations.

Tobacco. Only between 31 and 35% of this sample admitted to smoking cigarettes in the last thirty days. There was no lifetime question on

cigarette use. Almost 19% of the sample said they smoked between one and ten cigarettes a day. Smokeless tobacco seemed not to be a problem for this Guam sample. For both items, the average starting age was about 12.8.

Alcohol. Lifetime estimates of drinking and revealed a percentage well above 50% for this sample while lifetime occurrences of getting drunk or high from alcohol was 44.2%. Current alcohol usage in the last thirty days was 30% total and only 16% for being drunk in the last thirty days. Almost 30% of those admitting to drinking were 12 and under when they first drank while the majority (53.2%) of those who admitted to drinking first drank alcohol between the ages of 13 through 17. The average age at first drink was 14.3. Young people begin to smoke much earlier than when they begin to drink which suggests that much more preventative work needs to be done to curb youth smoking. Underage drinking seems to be a problem as well. Guam is the only place in the nation that still has the drinking age at 18 and liquor, mostly beer, is available easily at parties and weekend fiestas.

Marijuana or Hashish. There was an overall lifetime use percentage of 34% and a 36% lifetime percentage of getting high at least once. Current 30-day use was 16.3% and 15.2% for getting high at least once. For marijuana, the average age at first usage was 14.1.

Ice or Methamphetamine. Lifetime use for ice in this sample was 14.9% and the same percentage was seen for lifetime percentage of getting high from ice. Current usage was very low for this population at 1.4% or two respondents who used ice in the last 30 days. Average age at first use was 15.8.

Of these two illegal drugs, marijuana is more commonly used and is more easily obtainable than ice by far. This study may actually indicate a decrease in ice usage on Guam. Some recent focus groups have commented that ice is becoming harder to obtain and the legal interdictions have helped greatly to reduce the usage and occurrence. More young people become involved with marijuana at a much younger age than ice, which suggests that specific preventative programs targeting marijuana should be put in place. Other drugs like heroin, cocaine, and LSD seems not to be a current problem in the community.

Inhalant Use. The average age for first inhalant use was 12.6 which is the lowest average first use for all the substances in this study except for betel nut, which had a mean of 11.2 as the average age of first use.

Inhalants had the lowest lifetime and current use frequency for all previous substances in this sample. For all substances, age at first use was lower for inhalants which seems logical since it is not illegal to buy gasoline or magic markers or any other chemical that could be used to inhale. For this particular Guam sample, very few young people stated that they currently used inhalants or throughout their lives. However, some focus groups conducted by this research team have suggested that inhalant use is a very serious problem, especially for young Chuukese males. It is a cheap and available source of getting high.

Betel Nut and Tuba. These two substances were the only two mentioned by the respondents in this section. Both substances had the lowest overall frequencies for all substances in this study. For this sample, these two substances do not appear to be a problem for Guam society at this time.

Violence. This topic is rarely studied on Guam in any quantitative, systematic way. It is difficult to quantify and operationalize the concept of violence but it still is possible to do a rudimentary exploration. The most interesting finding from this section was that 53.4% of respondents have witnessed physical violence some time in their life. This sample from the community ranges in age from 13 through 25, so the opportunities to witness violence over shorter lifetime is are less. The four most common perpetrators were strangers, parents, and other relatives.

One other interesting finding was that the lifetime question of being a victim of violence revealed that nearly one in three (29.1%) had been a lifetime victim of violence but that a large majority of the victimization was perpetrated by their own parents. Almost 40% stated that they perpetrated violence at least once in their life and that the target of their victimization was strangers, boy/girlfriends, followed closely by parents.

This section on violence reveals that Guam may have an underlying violence problem in our young people that have not been properly studied or addressed and that parents seem to be an important "player" in these violence scenarios. Recent focus groups conducted by this research team has revealed that violence seems to begin at home and that many homes use some severe methods of discipline that according to today's standards, can be considered child abuse. Clearly more in-depth qualitative and quantitative studies should be conducted.

Suicide. Only four simple questions were asked of the participants for this section of the survey. The results revealed some interesting and disturbing findings. Nearly one in four of this community sample has

actually attempted suicide. This percentage is higher than the 19% that the Workman et al (1999) found in a sample of teenage youth on Guam. This result may be related to the over representation of females in the study. Recall that 60% of the respondents were female and females tend to have a higher attempted suicide rate than males overall, although males tend to be more successful in their bids to kill themselves. Many of the reasons that these young people have written about why they attempted suicide or why they seriously considered suicide are related to existential issues, relationship problems, and family problems. Like violence, there seems to be an undercurrent of despair running through our families on Guam that nobody wants to talk about. This wave of hopelessness have lead one out of every four young person to attempt to end his or her lives. A complex combination of personal, family, and environmental factors can lead someone to suicide but the common thread that may run through each case could be the loneliness and isolation that is felt by young people when the people in their lives are too busy, callous, and oblivious to talk. Again, parents and other adults in the lives of youth have to move to action to prevent further tragedies from happening. Recently, government officials convened a suicide task force to address this serious community issue. They have brought suicide into the forefront of the eyes of the community and have challenged people to confront and talk to youth that they suspect may be in despair. The hope is that this suicide epidemic can be halted or slowed and that families become empowered to do something about it.

RECOMMENDATIONS

Alcohol and drug abuse, violence and suicide are complex social problems, which can best be understood from a multi-dimensional, multi-layered perspective. All levels of society, including Federal, national, and local governments, community-based organizations, businesses, churches, schools, politicians, and individual citizens must be willing to address these problems together, in order to make any significant change in the *status quo*. Within this context, I would like to offer these concrete recommendations that are designed to inspire and encourage discussion and to lay the groundwork for innovative, action initiatives to combat this complex issue.

System Changes and Priority Shifting

In the treatment of these social ills, service providers will often talk about a "band-aid" approach to fixing the problem. Individual, family

therapy, mentoring, tutoring, and after school programs are all just "putting out small fires" in a larger, more complex "firestorm" of social and economic problems. Truly solving social ills is going to require more than a few individuals treating delinquents one at a time. It requires a multidimensional approach using multi-agency cooperation and communication. The system is flawed, because it is apparent that not only are our youth suffering, the entire island and entire Pacific region is in crisis.

This particular investigation into these social problems and the subsequent results represent only an isolated view, in a limited time period of study in 2001. Important and significant, historical events which happened decades and even centuries ago, set in motion the trajectory and direction that the people of Guam were to be headed. It will only take major, groundbreaking system changes and a genuine shift in priorities to see true and substantive results. Radical policy changes and innovative resource realignments in education, the justice system, legislative and executive branches, heath, and mental health are needed.

"Thinking out of the box" is the new catch phrase of the 21st century. It is a philosophy that espouses doing away with the old ways that are not working and creating new heuristics and epistemologies. The problems of violence, crime, suicide and abuse remain the same and will not abate on their own, yet the same solutions still exist and are woefully inadequate.

Focus Groups

The dialogue in a society must be ongoing. There is a need to organize and document focus groups and town hall meetings that address the significant social problems like crime and delinquency, alcohol and drug use, suicide, child abuse, and family violence. These problems are often kept a secret within families because of overwhelming fear, shame and stigma. Many families do not realize that the extent of the problem goes beyond their house walls and many would prefer to avoid the problems. Small focus groups of ten or less people provide intimacy, context, confidentiality, and ample opportunity to speak. From these smaller groups, town hall meetings can then be used as a vehicle to spread the dialogue even further and to develop new ideas and approaches to solve community problems. On Guam, like in many small communities, there is a hesitancy to talk and share such personal matters. Substantive dialogue and discussion can occur when people recognizing that social problems like suicide are much more global, pervasive and insidious than once thought or, at least until suicide touches us personally. Recently, when three teenagers committed suicide within three weeks of each other, the military community on Guam decided to convene two town hall meetings to address this issue. One of

the teenagers who committed suicide was from the Department of Defense high school. The local newspaper and television station covered the town hall meetings. For the next few weeks following the meetings, the topic of suicide was featured as the lead human-interest story of the day. Shortly after the headlines faded another 17-year old recently ended his own life. The story is the same and the pain is familiar. Even though it appears that talking about the problems seems not to help, regular and consistent focus groups and town hall meetings at least set the stage and environment for good, positive, and practical things to occur.

I propose that the first topic discussed in focus groups around the island, should be suicide and then family violence. These topics should be advertised often and meeting times for focus group and town hall meetings be posted daily on television classified ads, radio and newspapers.

Education, Awareness, and Use of Media

One of the problems with the majority of research and investigations such as these is that there is not enough media exposure and dissemination of the results. The media heads choose the stories to cover and scientific research rarely gets the lead story on the headlines. Researchers should be more assertive and persuasive to these media groups, so that their findings can make it into the consciousness of the masses. Awareness and education of the important and significant findings about Guam's population is a continuing process. The media in all forms must be used aggressively to constantly remind people that there are major problems inherent in the current system that results in countless suffering of indigenous people in their homeland. There is fundamental incompatibility of the modern culture with traditional culture. The system of government is not designed to build up a culture but designed to dismantle, compartmentalize, and dilute the essential and unique aspects of a culture. The system labels and pathologizes people separate from the contextual nature of their personhood. The current system of government has failed the people on many levels and it continues to perpetuate itself and waste tax money on frivolous projects and corrupt deals.

As is happening in many native lands, the population of indigenous people of Guam, the Chamoru, is experiencing a slow and steady cultural disintegration. Modernization, massive in-migration, irrelevancy of the native language in advanced education, and materialism have all contributed to the erosion of the native culture on Guam. Some indices of cultural disintegration including high mortality rates, high suicide rate, increase in family violence, poor health outcomes and juvenile delinquency.

For young people and those who work with them, education and awareness on the process of cultural disintegration and an appreciation

of their life context should be a focus of attention. Awareness can spur further positive action toward the overall goal of enhancing and restoring the culture and spirit of the native people. Continued use of the media in making people aware of the problems and to actively educating them on the positive aspects of culture should also be a priority for researchers and academicians. The only caveat for the media is that they must insure that the data they report is accurate. For the last few months the daily newspaper was reporting almost daily that there were 12 youth suicides so far for the year 2001. The actual number was 6 youth suicides but they continue to report 12. They later corrected themselves after some complaints were lodged.

Thus, I propose that a weekly series of panel discussions on various topics be broadcast on local television and radio. Each week, panel guests from different sectors of the community gather for one hour to discuss the possible causes of the social problems on Guam and to propose practical solutions. The results of these discussions can then be placed in the newspaper to further foster awareness and action.

For the 21st century, the worldwide web has become a formidable player in the media and in the world of research. I propose that a special website be solely designed to document the struggles that Guam and its people are undergoing. The website could allow for exchange of ideas, sharing of information from all over the world, and true global dialogue for possible solutions. The discussion can truly be international. People in other pacific island nations and in Asia will be able to brainstorm over stretches of oceans. As recent as ten years ago, technology did not allow this level of communication to occur. The time is now to take advantage of the new technology. However, many of those in need of services do not have access to the world wide web, so I also propose that free internet service be made available in the public libraries and government offices. Many of libraries and agencies have internet hookups and extra computers. The general public can use these computers to "surf" this juvenile delinquent website as well as other worthwhile websites. There are many in the community who are computer illiterate, but almost everyone has a television. The materials posted on the website can be placed on a cable channel 24 hours a day so that almost everyone has access to discussions, solutions, and dialogue about solving the most serious social problems like violence and suicide.

Future Studies and Investigations

Drug and alcohol abuse, suicide, and violence are some of the most serious social, economic, political and moral problems that the world

community faces today. This study revealed that these problems and real and formidable for Guam's youth. It was not the intention of this investigation to measure the extent and nature all those aforementioned problems, however, there is a need for accurate measurement, accounting, accountability of these problems in Guam society. Accountability is essential because specific, identified people need to take the initiative to move and explore with other people to start solving problems. If no particular individuals are identified then no one is held responsible and accountable.

Through their experience with clients, service providers inherently know that these social problems do not exist in a vacuum and they often overlap. Poverty leads to decreased opportunities and few alternatives, which then often leads to serious health problems, or drug and alcohol abuse, other criminal behavior, ethnic and racial strife, violence, and death. Policymakers must acknowledge the complexity, multidimensional and interdependent nature of these problems and recognize that it is not just a problem of a few that can be solved by a few. The Chamoru people are at stake and they need to reclaim their spirit, their history, and their lives. The Chamoru culture and spirit have been oppressed and denied for so many decades, and it appears it is succumbing to the weight of apathy, materialism, greed, corruption, and ignorance. The destruction and disintegration must stop, so that bridges can be built and the reconstruction of the Chamoru people can truly begin.

More studies of cultural identity and acculturation for various ethnic groups must be included as an essential component of cross-cultural research. These are proven methodologies that can create a database of baseline behaviors, attitudes, religious, and cultural practices of the Chamoru, Filipino, Chuukese, Caucasian, Palauan, and other Micronesian and Asian cultures on Guam (Bradley & Corwyn, 2000; Chen, Liu, & Li, 2000; Freitas, 2000; Gorman-Smith, Tolan, Henry, & Florsheim, 2000; Rothbaum, Morelli, Pott, & Liu-Constant, 2000). There is a tremendous need for studies that can document the essence, the strengths, weaknesses, and the core beliefs of a Chamoru on Guam and other ethnic groups that have made Guam their home. There are few, if any comprehensive updates or ethnographic narratives on the true experience of being a Chamoru in the 21st century. It is strongly recommended that the process and the dialogue begin before it is too late.

Thus, I propose that a research consortium and program be formed which would comprise of young, indigenous people willing to do research in collaboration with older, published researchers who are well-established on Guam. The consortium's mission would be to conduct research on specific social problems like suicide and at the same time train young

researchers in methodology and statistics. The hope is that this should inspire the younger generation to be curious, to question, to challenge old notions, and to discover new things. This current effort is the beginning of the activities of the proposed consortium. It is our hope that it will continue to generate momentum and energy over the next few years and that it results in the development of more, young indigenous researchers who are willing to work to studying and eventually solving Guam's most serious social problems. After all it is our future and our island.

CONCLUDING STATEMENTS: A PEOPLE IN CRISIS

Indigenous Chamoru families are experiencing overwhelming suffering. Data from public health officials indicate that Chamoru people have the highest rates of diabetes, heart disease, strokes and overall poor health when compared with other ethnic groups on Guam. This is usually one indicator of a people not adjusting and struggling with modern life. Overall, Chamorus receive more public assistance than any other ethnic group on Guam per capita including health care insurance like Medicaid. They are over represented in the prison system and have the most drug arrests, family violence arrests. They also have the most suicides overall when compared to other ethnic groups according to Guam Police Department statistics and the Guam family violence task force. Many indigenous Chamoru people are unable to adjust and fully benefit from the modernization, globalization, and technical advancements that a selected few, including some indigenous people, are able to enjoy. Indigenous people become disenfranchised in a system that favors those with political power, land, higher education, and money.

The struggle for survival that indigenous people have had over the last century has been well documented in the Native American Indians, the Native Hawaiian peoples, the Aboriginal Australians, and the Maoris of New Zealand (Chesney-Lind, Mayeda, Paramore, Okamoto, Marker, 1999; Freitas, 2000; Marsella, 1994; Marsella, Oliviera, Plummer, & Crabbe, 1995). Indigenous people suffer disproportionately in their own native land and in other places in which they have settled. The failure to thrive is generalized and perpetuated even outside their native lands because in U.S. communities all over the mainland, native peoples like Hawaiians, Chamorus, and Maoris are struggling for economic and cultural survival. Clearly, it is a struggle that they are losing. We are rapidly witnessing the deaths of cultures all over the world and in this part of the world, there seems to be little that is being done.

Appendix A

Guam History and Chronology of Events

Dates	Event	Impact and Discussion
Pre-1521 AD	Pre-European Contact.	Matrilineal family system predominates. Local tribes warring among themselves. Justice system consisted of elders and/or chiefs resolving family and clan disputes. Exiling to surrounding islands was the most severe form of punishment.
March 6, 1521	First contact—Spanish explorer Ferdinand Magellan sights Guam for the first time. Spanish colonialization of Guam begins.	Guam called "Islas de Ladrones", (Isle of Thieves) by Magellan because the natives took one of his skiffs. Original name was Isle of Lateen Sails before the change.
1668–1672	Spanish priest, Padre Luis de San Vitores leads an expedition of missionaries to convert the Chamorus to Christianity.	Mission work was initially successful, until in 1672 when Guam Chamoru Chief Matapang, because of a dispute, executed five members and Padre San Vitores. This event triggered a genocidal campaign by the Spanish government to punish and rule Guam at all costs. Chamoru rebellion begins. Chamoru population decimated by disease and warring with the Spanish armies.
1710	Census taken by Spanish Governor.	Population of the Marianas dropped from 100,000 pre-contact/ pre-rebellion to 4,000 post-annihilation.
June 20–December 10, 1898	Captain Henry Glass sailed into Apra harbor and captured the port of Guam on behalf of the United States Government. Treaty of Paris signed ceding Guam to U.S. as a territorial possession.	Patrilineal system continues. Land ownership concept continues but all transactions had to be approved by the Governor. U.S. military bases loosely established. Guam ushered into "modern age". U.S. Military and civilian governors appointed by the U.S. President take charge of daily governmental operations.
December 8, 1941	Japanese Bomb Guam, invade and occupy.	U.S. system of government, currency, commerce, and land ownership replaced by Japanese under the guise that Guam would remain a Japanese territory.

(*Continued*)

Appendix A (*Cont.*)

		Quality of life declines as war rages on, especially near the end when food rationing was implemented. Guam Chamorus hold out hope for U.S. intervention. War atrocities reported throughout the island.
July 21, 1944	United States bomb, invade, and takeover control of Guam.	At end of Japanese occupation, brutality and massacres increase against many islanders. Many Guam Chamorus hungry and thirsty when troops arrive. U.S. political, social, judicial, educational, and Westernized system re-established. U.S. Navy retains control over immigration and general governmental operations. Governor of Guam still appointed by President of the U.S.
August 1, 1950	Organic Act signed by President Truman.	Guam Chamorus granted U.S. citizenship. Guam becomes an official, unincorporated U.S. territory (non-U.S. statehood track). Guamanians granted basic Constitutional Rights but not given full rights like their fellow U.S. citizens in the mainland. First real U.S. conscription of Guamanians to help fight in the Korean War which left few young adult men on island at the time.
1954	Increase of H-2 workers and health professionals from the Philippines to help rebuild Guam, improve infrastructure, and provide health services.	Increase in male Filipino population who are able to stay on Guam. Filipinos comprise second largest ethnic group in Guam.
1962	President John F. Kennedy lifts the military security requirement for Guam.	This order opened up Guam to the rest of the world. It was to be the beginning of a true, free market on Guam. This paved the way for Guam to outside investors and resulted in Guam becoming one of the best tourist destinations for Asia. Local Guamanian businessmen begin to expand and grow.

1986	Compact of Free Association signed between the U.S. Government and the Freely Associated States of Micronesia.	This resulted in a major increase of inmigration of people from the Freely Associated States (Chuuk, Pohnpei, Kosrae, Yap, and Marshall Islands). Guam was not consulted regarding this decision. This caused tension between the local people and the FAS citizens and continues to fester.
August 1999	Government of Guam threatened to shut down due to lack of revenues.	Tension remains high in government offices as a threat of payless paydays loom large. Asian economic crisis and slowdown in tourism continue to adversely affect every aspect of Guam life.
February 2000	Welfare recipients numbered 9,223 for FY 1998 but by the end of 1999, the number rose to 14,596. Food Stamp recipients numbered 16,550 for FY 1998 but by the end of 1999, the number rose to 21,407.	Poor economy continues to affect public assistance programs significantly. Record number of people out of work and atmosphere of pessimism permeates Guam community.
May 2001	Suicide highlighted in local newspaper because 12 individuals, which includes 7 teenagers and young adults, committed suicide this year so far.	Suicide is another social indicator of Guam's socioeconomic decline and lack of community action to address problems.

EPILOGUE

Since penning this article recent events have affected Guam in a significant way. There has been major military build-up from the US Government to help fight the "War on Terror". This has resulted in a demand for jobs, rental properties, and an overall increase in revenues. In addition, the Asian economic downturn seems to have ended. Japanese and Korean tourists are returning to Guam in larger and unprecedented numbers. Ironically, despite these changes, the basic premise of this article remains; Native Chamorus are still struggling to make it in their own home in today's very complicated world and clearly, an economic boom is not the only answer to end the suffering. Like anything else, throwing money at a problem is never the only solution. Transformation begins from the inside out and the recommendations in this article are still relevant and can help tremendously in the reconstruction of the Chamoru people and its culture.

REFERENCES

Bradley, R. H., & Corwyn, R. F. (2000). Moderating effect of perceived amount of family conflict on the relation between home environmental processes and the well-being of adolescents. *Journal of Family Psychology, 14:* 349–364.

Chen, X., Liu, M., & Li, D. (2000). Parental warmth, control, and indulgence and their relations to adjustment in Chinese children: A longitudinal study. *Journal of Family Psychology, 14,* 401–419.

Chesney-Lind, M., Mayeda, D., Paramore, V., Okamoto, S., & Marker, N. (1999). *Delinquency and gangs in Hawaii: Volume I. Prevalence* (Publication No. 398). Honolulu, HI: University of Hawaii at Manoa, Youth Gang Project, Center for Youth Research Social Science Research Institute.

Cheung, F. K., & Snowden, L. R. (1990). Community mental health and ethnic minority populations. *Community Mental health Journal, 26,* 277–291.

Fong, R., & Mokuau, N. (1994). Not simply "Asian Americans": Periodical literature review on Asians and Pacific Islanders. *Social Work, 39,* 298–305.

Freitas, K. (2000). *Ho'omohala I na pua: A gender specific and culture based program for native Hawaiian girls.* Unpublished area of concentration paper. University of Hawaii, Honolulu, HI.

Gorman-Smith, D., Tolan, P. H., Henry, D. B., Florsheim, P. (2000). Patterns of family functioning and adolescent outcomes among urban African American and Mexican American families. *Journal of Family Psychology, 14,* 436–457.

Iijima Hall, C. C. (1997). Cultural malpractice: the growing obsolescence of psychology with the changing U.S. population. *American Psychologist, 52,* 642–651.

Levi, L., & Andersson, L. (1975). *Psychosocial stress: Population, environment and quality of life.* New York: Spectrum Publishing Co.

Marsella, A. J. (1994). Ethnocultural diversity and inernational refugees: Challenges for the global community. In A.J. Marsella, T. Bornemann, S. Ekblad, & J. Orley (Eds.). *Amidst peril and pain: The mental health and wellbeing of the world's refugees* (pp. 341–364). Washington, DC: American Psychological Association press.

Marsella, A. J., Oliviera, J., Plummer, M., & Crabbe, K. (1995). Native Hawaiian (*Kanaka Maoli*) culture, mind, and wellbeing. In H. McCubbin, E. Thompson, A. Thompson, & J. Fromer (Eds.). *Resiliency in ethnic minority families. Volume 1.: Native immigrant American families.* Madison, WI: University of Wisconsin Press.

Workman, R., Pinhey, T., Perez, M., & Taitano, R. (1999). *1999 Safe and drug free schools and communities study of youth risk behaviors.* Mangilao, Guam: University of Guam, Guam Cooperative Extension.

Chapter 8

Understanding Substance Use and Violent Behavior in a Native Hawaiian Community

Ayda Aukahi Austin and Anthony J. Marsella

INTRODUCTION

Alcohol, drug use, and violence are among the most serious health and social problems facing Native Hawaiians today in terms of our health and well being (Mokuau, 1996; Office of Hawaiian Affairs, 1998). As we attempt to identify the causes and extent of alcohol, drug use, and violence in our communities, it is also important to understand the social and cultural context in which these problems are occurring.

The goal of the present research project was twofold. First, an attempt was made to construct a research methodology and survey instrument that was appropriate for use with Native Hawaiians in its content and application. Second, data on the epidemiology, context, and perception of ATOD (Alcohol, Tobacco, and Drugs) use and violent behavior within the Native Hawaiian community was to be gathered using this methodology. The study examined alcohol, tobacco, and other drug (ATOD) use and violent behavior among Native Hawaiians living in a rural community on an outer island. Two focus groups consisting of community members and a survey of 88 Native Hawaiians using a paper and pencil instrument were conducted. Empirical findings from the research project are described in greater detail in another paper (Austin, 2004).

Alcohol and other drug use and violent behavior are among the most destructive social problems facing the world today. Substance abuse poses a major challenge to cross-cultural epidemiologists who recognize the difficulty of measuring even the most basic characteristics of drinking behavior because of the unavailability of data and the tremendous variation in cultural norms for drinking and drug use (Helzer & Canino, 1992). Few studies address the critical issues of what meaning or functions do these behaviors serve for each specific community and what affect does the surrounding social context have upon them. In addition, even fewer studies have been done to collect this much-needed data from Native Hawaiians and other Pacific Islanders. Makimoto (1998) points out that the drinking practices of Native Hawaiians and other Pacific Islanders living in the U.S. are the least studied due, at least in part, to the small sizes of these groups relative to the total population. Data from these groups are excluded, lumped in with Asian ethnic groups, or at best treated as a single homogenous group in a manner similar to American Indian tribal groups across the country.

Population

According to the U.S. census data collected in 2000, there are 282,667 full or part Native Hawaiians living in the State of Hawai'i, comprising 23% of Hawai'i's total population. The 2000 US Census altered the way that Native Hawaiians are categorized by allowing individuals to select multiple ethnic affiliations, which drastically decreased the number of individuals indicating Native Hawaiian as their only ethnic group from 233,193 people in 1990 to 80,137 people in 2000 (United States Census Bureau, 2000). This has implications for policy and funding decisions that may be based upon an inaccurate picture of the population in need. One way to more accurately represent the Native Hawaiian population is to include data incorporating both individuals who indicated a single ethnic group, and those that indicated "Native Hawaiian" as one of multiple ethnicities.

Native Hawaiians are a relatively young population living in mostly poor and rural areas. The major concentrations of Native Hawaiian communities center on or near federally designated Hawaiian Home lands. As a group, these communities account for 31% of Hawai'i's welfare recipients, 35% of the adult prison population, and 50% of its incarcerated juveniles (Honolulu Advertiser, April 30, 2001). The mean annual family income in 1989 for Native Hawaiians was $43,664 as compared with $52,363 statewide. Median family income for Native Hawaiians was $37,960 as compared with $43,176 (OHA, 1998).

Hawaiian Health

Native Hawaiians were a robust and healthy people at the time of first contact with Captain James Cook. "Foreigners had not yet come from other lands; there were no fatal disease, no epidemics, no contagious diseases, no diseases that eat away the body, no venereal diseases," (Kamakau, 1991). In contrast, Native Hawaiians today have the highest average rates of many health-related problems in the state. According to data from the Office of Hawaiian Affairs (1998), Native Hawaiians have the highest rates of diabetes, hypertension, heart disease, certain forms of cancer, and have the shortest average life-span of the major ethnic groups represented in Hawai'i.

National data on family characteristics such as household income and household makeup often misrepresent the conditions under which Native Hawaiians live by lumping data from Native Hawaiians in with the Asian/Pacific Islander Americans. This grouping, although convenient for census coding purposes, is essentially meaningless in that the distinct ethno-cultural groups that make up this category vary in very meaningful ways across these demographic variables of interest. Marsella, Oliveira, Plummer, and Crabbe (1995) reported that Native Hawaiians were at much higher risk than other Asian and Pacific Islander American ethno-cultural groups for a wide range of health and well-being indicators. Native Hawaiians have higher rates of bronchitis, cancer, high blood pressure, emphysema, asthma, obesity, infant mortality, teen pregnancy, arrests and prison sentencing than other Asian and Pacific Islander ethno-cultural groups in the State of Hawai'i (Marsella et al., 1995). Mokuau (1996) reported that in addition to a plethora of other health-related problems, Native Hawaiians have more serious drinking problems than other ethnic groups in Hawai'i. They have higher incidence of binge drinking and more chronic drinking that increase the likelihood of alcohol dependence and abuse. These higher rates of problem drinking are best understood within their historical and socio-cultural contexts.

Traditional Hawaiian Values

The indigenous people of Hawai'i, *Na Kanaka Maoli*, or Native Hawaiians, have a history in the islands that spans 2000 years. The traditional collectivist culture of Native Hawaiians is based upon several basic values including: *'aina*, *'ohana*, *lokahi*, and *aloha*. *'Aina* refers to the land or earth and can be thought of as that which feeds. *'Aina* can also be thought of in a psychological and spiritual sense as well. *'Ohana* refers to family, or "that which spreads and grows with love" (Rezentes, 1996). *Lokahi* refers

to balance, unity, and harmony within the self, and between the self, one's *'ohana*, the *'aina*, and *Ke Akua* or God(s). Balance was achieved in the Hawaiian world via the presence of dualism and polar opposites such as night and day, male and female, Papa and Wakea, or earth and sky (Kanahele, 1992). *Aloha* represents a combination of positive emotions that tie all of the other values together. By saying and feeling *aloha*, "one shares one's inner spiritual essence through one's breath" (Rezentes, 1996).

Hawaiians are a very spiritual people. Spirituality was incorporated into every aspect of traditional Hawaiian life. Every creature and every object, down to the smallest pebble, was perceived as alive with *mana*, or energy. Respect for plant and animal life and the environment were a natural consequent of this strong belief that humans are created of the same energy that inhabits trees, rocks, and animals.

Family plays an essential role in Hawaiian culture both traditionally and in the present. Close-knit extended family members and the inclusion of ancestors and future descendants are important features of the Hawaiian family (Rezentes, 1996). In fact, in traditional Hawaiian society, it was primarily the family's responsibility to intervene in problem situations (Pukui, Haertig, & Lee, 1972).

ALCOHOL, SUBSTANCE USE, AND VIOLENCE

Familial Ties, Violence, and Substance Use

Participants in a Native Hawaiian focus group were asked to describe the role of family both in their lives and in relation to substance use and violence. Their responses highlighted the strength of familial ties in their community and demonstrated how complicated and strained these relationships can become when substance use and violence are present.

> "Family is an essential part of life. Breaking up the family [in response to drug use or spouse abuse] causes more trauma than enduring."
>
> "It takes a lot for a Native Hawaiian wife to say, 'this [violence and drinking] is so bad that for the benefit of my family, I have to sever this.' I think Native Hawaiian women go a long way before they get there and unfortunately I think that for a lot of them, it gets so bad, they just become a part of the problem, they join 'em."

This woman was explaining that preserving her family was more important than escaping her husband's alcohol use and occasional physical abuse. She believed that both she and her children would suffer more from separation from one another and from their extended family than they would from continuing to live with an alcohol abuser.

Another example of the importance of family to Native Hawaiians came from one focus group participant who spoke about having a child with drug and alcohol problems. She stated that although she may threaten to force her child out of her home and not let him/her return, she could never refuse to take her child back because, "Hawaiians can't do that . . . Because we're connected to each other just like the land . . . this is MY child." The loyalty to her child that this woman expressed was heartily endorsed by the group and reflects a similar message of enduring for the sake of preserving the family.

Traditional Hawaiian Conceptions of Aggression

Pukui, Haertig, and Lee (1972) provide some insight into traditional Hawaiian beliefs and sanctions related to aggression and violent behavior. One belief was that violence was not exclusively physical in nature. Words, gestures, and even thoughts could be considered acts of violence against another person. Gossip was considered violence, as was deliberate ignoring and grumbling. Any open conflict that would result in hurt or embarrassment including making accusations was discouraged because it would disrupt the harmony of the group. There was an elaborate set of rules for social etiquette surrounding the preservation of harmony. "Don't be boastful because it will cause jealousy" was one such rule.

Handy and Pukui (1998) discuss the strongly negative view traditional Hawaiians held about expressing anger. "*Aloha mai no, aloha aku: o ka huhu ka mea e ola 'ole ai*- When love is given, love should be returned; anger is the thing that gives no life" (Handy & Pukui, 1998).

Under missionary influence, physical violence between adults was condoned only under circumstances involving possible infidelity. There were, however, strict social limits on physical assault. "It was forbidden to hit the head, tear the clothing, or break the skin. If a man did any of these things- or if the woman did- then the 'ohana, usually a senior, would step in and separate the two" (Pukui et al., 1972). Although these beliefs are more reflective of post-missionary philosophies about jealousy and infidelity than of traditional Hawaiian values, they have important implications for current discussions of domestic violence in the Hawaiian community, especially with regard to the familial responsibility to guard against extreme abuse.

Pukui et al. (1972) reported that many of the same rules apply to physical punishment of children. The head and shoulders could not be touched, nor could the child be hit on the back, the stomach, or the arms and hands. A child could be spanked on the legs or ankles, but never above the knees. If parents broke any of these rules, other family members would

take the child away and raise her or him elsewhere. If a child were severely mistreated, the abuser might be cut off from the family completely. In a cooperative society like this one, where labor and resources are shared among family members, this was a very severe penalty.

Two important points come out of these descriptions of physical violence toward family members. The first is that there were specific *kapu*, or laws, regarding limitations on acceptable forms of physical violence. This is important because it demonstrates that social controls were in place in traditional to protect community members including women and children. The second important point is that it was the responsibility of the extended family to monitor these behaviors and take action if any *kapu* were broken.

Violent Behavior in the Present

Data from the survey of substance use and violent behavior suggest that violence Nearly three-fourths of the individuals who completed the survey reported having some experience with violent behavior as a witness, victim, or perpetrator. Eighteen percent of the total sample reported having experienced all three forms of involvement with violence in their lifetimes.

A high rate of victimization by family members was reported among women respondents. Data from the survey suggest that 36% of women respondents reported being the victims of violence. Spouses and other family members reportedly perpetrated the majority of these incidents. While these figures are difficult to interpret in terms of understanding the circumstances surrounding the violent behavior, the rate is high enough to suggest that violence among family members is a community-wide problem.

Traditional Hawaiian Views on the Relationship Between Substance Use and Aggression

Traditional Hawaiian beliefs on the nature of the relationship between substance use and violence were different from our modern beliefs. *'Awa*, a mildly intoxicating beverage that was used ritually and as an everyday relaxant, was viewed as a means of "draining off aggression". Hawaiians believed that *'awa* made a person incapable of violence (Pukui et al., 1972). This position on the use of a substance as a means to curb aggressive behavior is directly at odds with our current understanding of the relationship between alcohol use and violent behavior. One could argue that the two substances act upon the nervous system differently, thus explaining their differential behavioral outcomes. *'Awa* use is much less prevalent than

alcohol use and other drug use today. It is possible that some remnant beliefs about the positive impact of *ʻawa* use on violence may affect current Native Hawaiian beliefs about alcohol use, but there is no data available yet to inform that question.

Substance Use and Violence in the Present

The data from both the survey and focus groups suggest two major patterns of interaction between substance use and violent behavior. The first is that having a history of alcohol and substance use is related to exposure to violent behavior across the lifespan. For example, a significant relationship was found between the age at first use of alcohol and lifetime frequency of violence exposure including witnessing, perpetrating, and being a victim of violence. One participant in a focus group expressed a similar perspective when she said, "I think most drinkers are violent. It's in their backgrounds, a cycle." Although her statement did not reflect the finding that non-drinkers in our study were also exposed to violent behavior as witnesses, victims, and perpetrators, she accurately described the relationship that was found between age at first alcohol use and lifetime frequency of exposure to violence.

Second, substance use and violent behavior co-occur across the lifespan beginning with the age at first exposure. The age at which an individual first used alcohol was significantly correlated with the age at which that same individual first witnessed violence. Focus group participants also identified this relationship, "The violence breeds itself. If you're violent and you're drunk, then that just predisposes you to violence later on . . . "

The participants in the focus group discussed what they believed to be the relationship, if any, between alcohol use and violent behavior. "And yeah, we had violence in our own home and the subject was alcohol but I don't know if the fight started because somebody was under the influence." "Well, every time I seen somebody fight, they was under the influence." "I've seen someone overtly discipline their child more than they would have if they weren't drunk."

Their conclusion was that while they were sure that alcohol and violent behavior tended to happen in the same situations, the end of a party for example, they were uncertain as to whether alcohol caused or merely amplified violent behavior (see Austin, 2004).

THE IMPACT OF COLONIALISM

Many of the problems facing Native Hawaiians today are compounded by their history of colonization. Native Hawaiians, like American

Indians and Alaska Natives, are indigenous to their islands that are now a part of the United States. The pressures that Native Hawaiians experience are somewhat different from those experienced by members of other ethnocultural minority groups who voluntarily or involuntarily immigrated to the United States from their ancestral homelands. They share many cultural similarities with the peoples of the Pacific and share cultural, political, and philosophical similarities with the other indigenous peoples of the United States.

Marsella, Oliveira, Plummer, and Crabbe (1995) discuss the nature of Hawaiian thought and sense of mental, physical, and spiritual well being in the context of Hawaiian history. The illegal overthrow of the Hawaiian monarchy and the resulting dispossession of their ancestral homelands have taken their toll on Native Hawaiians. Native Hawaiians have endured tremendous racism and devaluing of their identity and way of life. Illness of the minds and bodies of Native Hawaiians is the result.

Kanahele (1992) discusses the destructive effect that dispossession of Hawaiian lands had upon Native Hawaiians. He argues that having a sense of place is an essential feature of Hawaiian identity as it provides a sense of permanence, continuity, and security. Upon losing their ancestral homelands, Kanahele (1992) suggests that Native Hawaiians also lost a critical aspect of their identities, "Uprootedness in every sense of the word: being cut off from the most vital physical, psychological, social, and spiritual values of one's existence."

One of the participants in a Native Hawaiian focus group discussion alcohol, drugs, and violence in the Hawaiian community spoke on this issue by describing the outlook of Native Hawaiian high school students:

> "They see it as hopeless. I look at these kids today and they have no hope, they see no future. Like K____ saying, 'Oh I going graduate now' and main thing was he can get his own welfare check . . . that was his whole aspiration."

Dubanoski (1981) argued that these feelings of powerlessness, hopelessness, and conflict that result from cultural disintegration and conflict between traditional Hawaiian values and modern values contribute to higher rates of child abuse among Native Hawaiians than would be expected given their population size. This finding is even more distressing when one considers that value that traditional Hawaiian culture placed on children. A Native Hawaiian focus group participant reflected on the influence of economic pressure and westernization on her family life growing up in the 50s and 60s:

> "That stress did cause violence in our home. And when we were little, Mom, when you and dad would have stress, we'd have violence."

PROTECTIVE FACTORS

While most research on alcohol and violence in communities is focused on determining causal or contributing factors, understanding resiliency and protective factors is also very valuable at both practical and conceptual levels. At a practical level, identifying protective factors provides direction for future prevention strategies. At a conceptual level, research that involves the study of both risk and protective factors can be more realistic in terms of its portrayal of the community of interest. Communities can better understand the problems they face if they are also aware of the resources they have to solve them.

Positive family connectedness was found to significantly protect adolescents from alcohol and drug use (Pihl, 1999). Duncan, Tildesley, Ducan, and Hops (1995) found that peer encouragement and family cohesion predicted alcohol use, smoking, and marijuana use in U.S. mainland adolescents. McCubbin, Thompson, Thompson, Elver, and McCubbin (1998) used a scale developed specifically for Native Hawaiian populations to determine that family cohesion is also a protective factor for Native Hawaiian groups. Nahulu, Andrade, Makani, Johnson, and Waldron (1996) found that contrary to findings with non-Hawaiian samples, Native Hawaiian adolescent boys report nearly equal levels of family support as Hawaiian girls. This consistent finding provides strong evidence that prevention and treatment programs should incorporate family factors such as cohesion into their work, especially with Native Hawaiian populations.

There is some evidence that culture-related factors such as revitalization of the indigenous language, religious customs, family-support systems, and healing rituals are effective in reducing youth suicide and alcohol abuse among American Indian populations (Canda & Yellow Bird, 1997). Gaughen (1996) provided some preliminary evidence that suggests that the same may be true for Native Hawaiians. He found that taking Hawaiian language classes led to greater self-esteem among Native Hawaiians. Given the social, political, and spiritual parallels between American Indians and Native Hawaiians, issues of language use, spirituality, healing rituals, identity and other culture-related factors must be further explored as potential protective factors for the Native Hawaiian community.

Although the focus of much of the research on resiliency and protective factors lies in identifying individual characteristics such as emotional management and problem solving skills, there has been a recent trend toward identifying protective factors across a number of domains including peer, family, school/work, and community (Kumpfer & Hopkins, 1993). One aspect of community protective factors that is not often discussed is the physical characteristics of the neighborhood or area in which the

community resides. When participants in a focus group were asked to identify the strengths of their community, the first response that was given was the body of water that bordered their community, followed by physical beauty of the place.

> "It is a beautiful place- it makes a difference you know, less stressful. Can you imagine one Hawaiian with these same problems living in Honolulu- there's no beach to go to and when you go to the beach you gotta fight the traffic find a place to park have gas money to get there- you live here, you just go down there- you can drink on the beach and not beat your wife up in the apartment, you know? It makes a difference I think when you have a place like that."

THE ROLE OF LAUGHTER IN HAWAIIAN CULTURE

Often when the history and present status of Native Hawaiians is discussed, the focus of the discussion is usually on identifying the causes of current problems and on detailing the parameters of how bad the problems the Hawaiian community faces really are. Very little attention is paid to those factors and qualities that Native Hawaiians as a group possess that make them a resilient and enduring force in the world. Humor is one such factor. Native Hawaiians, not unlike other Pacific Island peoples, are very emotionally expressive. "Friendliness and affection are a tonic and lubricant which constitute two chief ingredients of the joyous temperament of our Hawaiian people" (Handy & Pukui, 1998). Whether the emotion is intense grief or joy, traditional Hawaiian culture supported and encouraged open expression of feelings.

> "When the wind blows, the leaves are waving- they're smiling. When you throw a rock into a pool and the ripples go out- the water is smiling. That's the energy," (Eddie Pu, Native Hawaiian Park Ranger, in Harden, 1999).

Just as individuals and family systems vary in what constitutes resiliency and protective factors, ethno-cultural groups also possess attributes or shared ways of interacting that may make a group more resilient to challenging situations. During the course of both focus group sessions, one such pattern of resilient behavior emerged. The topics discussed during each of the focus groups were extremely difficult and often personal in nature. Individuals relayed the details of personal experiences with violence, with coping with drug addiction and criminality among family members, and with their own feelings of sadness or distress about the negative changes they see happening in their community. Each time the conversation reached a peak of emotionality or tension, a member of

the group would make a joke and laughter would ensue. The pattern of laughter was consistent and predictable across both focus groups:

> "Depends how you define poverty. If you took a measure of what we're worth, we're poor, but the first priority when you get a little money is to buy alcohol. He uses guava leaves for toilet paper 'cuz he only get enough money to buy a six pack. Well I'm telling you, I would buy the toilet paper!" [Laughter erupts within the group]
>
> "Yeah but see, a little fear goes a long way. From that fear comes respect, but on the other hand there's that fine line that gets crossed to where children are being battered- it's not an easy problem- I know I figure if my son is going down the road to do drugs, it's okay if I break his legs." [The group laughs and teases the speaker for overstating]

An outsider happening upon the situation might interpret this laughter as inappropriate given the troubling and sensitive nature of the topics being joked about and yet participants in the discussion appeared relieved after each such incident. The humor and laughter serve to relieve the tension of the situation and to put boundaries on what could otherwise cause limitless sorrow and worry. The use of humor in the focus group also added an element of honesty and candor among participants as they were able to disclose sensitive information about their family's history of addiction and physical abuse without fear that they would be judged negatively for it.

This is not to say that one should interpret laughter in the face of issues such as alcohol, drug use, and violent behavior as a sign that Native Hawaiians do not consider these issues to be problems that warrant intervention. The argument made here is that an effective and appropriate prevention program should consider incorporating Hawaiian conceptions of humor and laughter into interventions. In addition, individuals working with the Native Hawaiian community should understand the role that laughter and humor play in the way that Native Hawaiians interact and communicate with each other so that they can make appropriate attributions about why individuals might seem to be making light of objectively negative topics or situations.

RURAL CHALLENGES

Mokuau (1990) describes the difficulty Native Hawaiians and other residents of rural communities on the outer islands have accessing social service programs. Most health and social service organizations are run out of Oahu. Native Hawaiian residents of the outer islands must rely

on the community-based programs and services available for immediate, affordable care. Given that the majority of Native Hawaiians live in rural area, this issue is especially relevant to discussions of Native Hawaiian access to health care.

The difficulties Native Hawaiians face in accessing health services on the outer islands are not unlike the challenges faced by Americans living in rural areas. Pilgrim et al. (1998) identify the challenges associated with implementing prevention programs in rural communities. They cite large geographic distances between community members, lack of transportation, lack of alternative recreational activities for youth, a strong sense of self-reliance and privacy among families in rural communities which make them resistant to participation in programs, and the lack of anonymity which may place families that disclose information about themselves during the program in jeopardy of public ridicule or judgment.

CONSTRUCTING RESEARCH METHODOLOGY

Alcohol abuse and violence are culturally-bound constructs. The need for culturally relevant definitions of the meaning, function, and presentation of alcohol abuse and violence is as important as prevalence rates. In constructing a research methodology to be used with a Native Hawaiian community, great care was taken to frame the inquiry in as open-ended a manner as possible, coupled with the sincere intention of understanding these problems from the perspective of the individuals they impact.

Several authors have written about the merits of using a variety of research strategies for working within indigenous and rural communities (e.g. Westermeyer et al., 1981; Durst, 1991; Carr, Marsella, & Purcell, 2002). These authors advocate a multi-method strategy of gathering information that incorporates both qualitative and quantitative methods.

Durst (1991) emphasized the important role of the researcher's personal contact with the communities in conducting valid and ethical research. He argued that this relationship serves two important functions. First, he cited community members' reports of feeling exploited by outsiders doing research on them to serve external institutions rather than their own community's needs. Having a personal relationship with the community enables the researcher to convey his or her intent to serve the people being researched through the knowledge that is gained. Second, Durst argued that he was able to get more open and candid disclosure of information from community members than he would by conveying a distant and "objective" façade. Both of these components were used in

the present study of Native Hawaiians in an attempt to present a more complete picture of the nature of drinking patterns and violent behavior in this community. Data from focus groups was used to provide qualitative support for the quantitative data collected from a much larger sample of community members. This type of information was especially useful in determining the sensitivity of the survey instrument and in evaluating whether the instrument contained relevant and representative items regarding the problems of greatest concern to this community.

In conducting research in a closely knit Native Hawaiian community on a neighbor island, several important principles had to be maintained in order to protect the community this research was intended to benefit. First, the research questions driving the study had to be ones whose answers would benefit the community directly regardless of their direction or magnitude. Second, data collection must happen in manner that is consistent with cultural norms, and third, researchers must proceed in their endeavors with humility and openness.

This first principle, which states that one should only conduct research if it will benefit the community from which it came, can be applied to every aspect of the research process. It should be considered when selecting research questions that are important, choosing methodology, engaging participants in the process, using data appropriately, and disseminating findings back to the community. From this perspective, it is the responsibility of the researcher not only to collect data in a sensitive way, but also to ensure that the information learned from the study benefit the community in as direct a manner as possible or run the risk having participants feel as though they have been exploited.

The second principle, which states that data collection should whenever possible proceed in accordance with cultural norms for interaction, influences the type of methodology that will be appropriate along with issues related to engagement and recruitment. For example, although there was a specified list of topics and a time limit for focus group discussions, when the eldest participant chose to engage in storytelling near the end of the evening, all other discussion ceased and *kupuna* was given our undivided attention. The focus groups' behavior was consistent with Hawaiian cultural norms of treating elders with referencing and not interrupting others when they are speaking. Her response was non-linear and not easily quantifiable, but was clearly among the most valuable pieces of information gathered during that session because she had listened patiently to our discussion for hours and told a story that captured her unique perspective on the topic.

The final principle, proceed with humility, is especially important in that it conveys the overall spirit or attitude that I found to be essential

in working with a Native Hawaiian community. Respect, patience, openness, and gratitude were conveyed at every point to participants and other community members that came into contact with the project. The survey method was deliberately unassuming, as questions were phrased in an open-ended manner. In addition, the method of recruiting participants was designed to allow individuals to give their consent publicly and then determine privately whether they were actually willing to complete it without the risk of enduring shame.

Along the same lines, openness by the interviewer appeared to play an important role in making individuals more willing to complete the survey and participate in the focus group. Individuals seemed much more willing to participate in the study after becoming acquainted with me and having a chance to determine my sincerity. It appeared that respondents did not complete the survey because they were necessarily invested in finding out more about substance use and violent behavior in their community, but rather because they wanted to lend their help to someone with whom they had an exchange, however brief.

CONCLUSION

The primary conclusions drawn from this study is that the process of attempting to construct and implement a research methodology in a way that serves rather than takes from the community it centers around was worth as much or more than the actual data gathered. Factors such as designing a methodology that seeks to understand what the community itself sees as their own strengths and weaknesses, linking data to the historical and cultural context in which it occurs, and observing protocol in social interactions appeared throughout the process. The lessons learned from this project will undoubtedly inform future research projects undertaken in the Native Hawaiian community across a wide variety of settings, both urban and rural.

REFERENCES

Austin, A.A. (2004) Alcohol, tobacco, and other drug use and violent behavior: ethnic pride and resilience. *Substance Abuse and Misuse, 39*, 721–746.

Canda, E.R., & Yellow Bird, M.J. (1997). Cultural strengths are crucial. *Families in Society, 78*, 248.

Carr, S., Marsella, A.J., & Purcell, I. (2002). Researching intercultural relations: Towards a middle way. *Asian Psychologist, 3*, 58–64.

Dubanoski, R.A. (1981). Child maltreatment in European- and Hawaiian-Americans. *Child Abuse and Neglect, 5*, 457–465.

Duncan, T.S., Tildesley, E., Duncan, S.C., & Hops, H. (1995). The consistency of family and peer influences on the development of substance use in adolescents. *Addiction,90*, 1647–1660.

Durst, D. (1991). Conjugal violence: Changing attitudes in Northern native communities. *Community Mental Health Journal, 27*, 359–373.

Gaughen, K.J. (1996). *Effects of Participating in a Hawaiian Language Class on Hawaiian Adolescents' Self-Esteem and Ethnic Identity*. Unpublished master's thesis, University of Hawai'i at Manoa.

Handy, E.S.C., Pukui, M.K. (1998). *The Polynesian Family System in Ka'u, Hawai'i.* Australia: Mutual Publishing.

Harden, M.J. (1999). *Voices of Wisdom: Hawaiian Elders Speak*. Kula, Hawai'i: Aka Press.

Helzer, J.E., & Canino, G.J. (1992). Epidemiology and cross-national comparisons. In J.E. Helzer, and G.J. Canino (Eds.), *Alcoholism in North America, Europe, and Asia*, (pp. 3–12). New York: Oxford University Press.

Kamakau, S.M. (1991). *Ka Po'e Kahiko, The People of Old*. Honolulu: Bishop Museum Press.

Kame'eleihiwa, L. (1992). *Native Land and Foreign Desires: Pehea La E Pono Ai?* Honolulu, Bishop Museum Press.

Kameoka, V.A. (1998). Psychometric evaluation of measures for assessing the effectiveness of a family-focused substance abuse prevention intervention among Pacific Island families and children. In N. Mokuau (Ed.), *Responding to Pacific Islanders: Culturally Competent Perspectives for Substance Abuse Prevention, CSAP Cultural Competence Series 8,* (pp. 25–47). Rockville, MD: DHHS.

Kanahele, G.H.S. (1992). *Ku Kanaka, Stand Tall: A Search for Hawaiian Values*. Honolulu: University of Hawai'i Press.

Kumpfer, K.L., & Hopkins, R. (1993). Prevention: Current research and trends. *Psychiatric Clinics of North America, 16*, 11–20.

Makimoto, K. (1998). Drinking patterns and drinking problems among Asian-Americans and Pacific Islanders. *Alcohol Health and Research World, 22*, 270–275.

Marsella, A.J., Oliveira, J.M., Plummer, C.M., & Crabbe, K.M. (1995). Native Hawaiian (Kanaka Maoli) culture, mind, and well-being. In H.I . McCubbin, A.I. Thompson, & J.E. Fromer (Eds.), *Resiliency in ethnic minority families. Vol. 1: Native and immigrant American families*, (pp. 93–112). Madison, WI: University of Wisconsin System.

McCubbin, H.I, Thompson, A.I., Thompson, E.A., Elver, K.M., McCubbin, M.A. (1998). Ethnicity, schema, and coherence: appraisal processes for families in crisis. In H.I. McCubbin, E.A. Thompson, et al (Eds.), *Stress, coping, and health in families: Sense of coherence and resiliency, Resiliency in families series, Vol. 1*, (pp. 41–67). Thousand Oaks, CA: Sage Publications.

Mokuau, N. (1990). The impoverishment of Native Hawaiians and the social work challenge. *Health and Social Work, 15*, 235–242.

Mokuau, N. (1996). Pacific Islanders. In J. Philleo, F.L. Brisbane, L.G. Epstein (Eds.), *Cultural Competence for Social Workers: A Guide for Alcohol and Other Drug Abuse Prevention Professionals Working with Ethnic/Communities, CSAP Cultural Competence Series 4*, (pp. 157–188). Rockville, MD: CSAP.

Mokuau, N. (1998). Reality and vision: A cultural perspective in addressing alcohol and drug abuse among Pacific Islanders. In N. Mokuau (Ed.), *Responding to Pacific Islanders: Culturally Competent Perspectives for Substance Abuse Prevention, CSAP Cultural Competence Series 8*, (pp. 25–47). Rockville, MD: DHHS.

Nahulu, L.B., Andrade, N.N., Makini, G.K., Yuen, N.Y.C., McDermott, J.F., Danko, G.P., Johnson, R.C., & Waldron, J.A. (1996). Psychosocial risk and protective influences in Hawaiian adolescent psychopathology. *Cultural Diversity and Mental Health, 2*, 107–114.

Office of Hawaiian Affairs (1998). *1998 Native Hawaiian Data Book*. Honolulu, HI: Author.

Pihl, R.O. (1999). Substance abuse: etiological considerations. In T. Millon, T. Blaney, & R.D. Davis (Eds.), *Oxford Textbook of Psychopathology*, (pp. 249–276). New York: Oxford University Press.

Pilgrim, C., Abbey, A., Hendrickson, P., & Lorenz, S. (1998). Implementation and impact of a family-based substance abuse prevention program in rural communities. *The Journal of Primary Prevention, 18*, 341–361.

Pukui, M.K., Haertig, E.W., & Lee, C.A. (1972). *Nana I Ke Kumu (Look to the Source), Vol. 2*. Honolulu: Hui Hanai.

Rezentes, W.J. (1996). *Ka Lama Kukui: An Introduction to Hawaiian Psychology*. Honolulu: 'A'ali'i Press.

Westermeyer, J., Walker, D., & Benton, E. (1981). A review of some methods for investigating substance abuse epidemiology among American Indians and Alaska Natives. *White Cloud Journal, 2*, 13–21.

Chapter 9

The Republic of the Marshall Islands

Michael Jenkins and Cleveland McSwain

INTRODUCTION

Location/Geography

The Republic of the Marshall Islands (RMI) geographically consists of 29 low lying coral atolls and 5 single islands, scattered over 780,000 square miles of ocean and located roughly 2,100 miles SW of Hawaii and 2,900 miles northeast of Australia. These atolls and single coral islands are situated in two nearly parallel chains, referred in the local vernacular as the "Ratak" (Sunrise), or eastern chain and the Ralik ("Sunset") or western chain. These chains form in a general northeast by southeast direction. The two chains of islands and atolls form two traditional and political subdivisions. In earlier history, there were two distinct dialects spoken, specific to each chain. Over the years, however, these dialects have merged into a common language. Although these two areas spoke different dialects at earlier periods in history, they have always shared a common culture.

At 780,000 square miles of ocean the RMI covers a geographical area larger than Louisiana, Texas, etc combined (World Almanac, 2000). In contrast to the 780,000 square miles of ocean under the RMI national jurisdiction, there is only 70 square miles of habitable landmass. This landmass is divided amidst 29 atolls and 5 single islands. (RMI Census of Population and Housing, 1999). These atolls are comprised of separate tracts of land connected by reef or proximity, yielding more than 2,200 separate islands

and islets in RMI. The islands are of the coral-reef type and rise only a few feet above sea level (Time Almanac, 1999). There are no mountains, rivers, or streams in the RMI.

Given the placement of the Marshall Islands in the remote Pacific Basin, and the location of the islands relative to one another, the entire republic must be considered a "hard to reach" area, much like rural areas in the United States. Although the two urban centers are serviced by international flights, and modern day telecommunications infrastructure, the islands become progressively "harder to reach" depending on their location relative to the two main centers. Travel amongst these areas is only available via cost prohibitive air travel or time consuming open ocean ship transport. The only uniform mode of communication between the urban centers and outlying areas is by short wave radio.

Population

RMI has undergone a national census initially in 1988 and again in 1999. The population of the islands at the time of the 1988 Census was 43,380. At the time of the last (1988) census, the population growth rate was estimated at 4.2%, which is very high by international standards. At that rate, the population of RMI would have doubled in 17 years, by the year 2005. The average number of children per woman was 7.2, and the average number of persons per household was 8.7 (RMI Census, 1999, p. 59).

The 1999 Census indicated a population of 50,840, which reflects a 1.5% increase over the 1988 census. This represents a major decease relative to the projections. The 2004 population estimate is 57,738 with almost 40% being younger than 14 years of age. The population growth rate is 2.3% (CIA Factbook, 2004). The average number of children per woman is still around 7.2, but the average number of persons per household decreased to 7.8.

Population Distribution. The RMI population distribution is generally divided amidst three geographical areas. Majuro Atoll is the site of the heaviest population, and the nation's capital. Ebeye Island, which is located in Kwajalein Atoll, is the second major population center, and only other urban area in RMI. The remaining 27 atolls and five single islands are colloquially referred to as "the outer islands".

At the time of the 1988 census, 45.3 % percent of the population resided on Majuro, 21.5% resided on Ebeye, and 33.2 resided in the outer island areas (1988 Census, p. 15). At the time of the 1999 census, 68% of the population resides on Majuro, 21.4% reside on Ebeye, and 18% reside in the outer islands. This reflects an overall 5.6% migration rate in the urban areas.

Population Density. The 1999 census indicates that Majuro has a moderate population density with 6,300 persons per square mile. Ebeye Island in Kwajalein Atoll has a population density of 66,750 persons per square mile, which makes it one of the most densely populated areas in the world. The outer islands have a population density of 268 persons per square mile, making this area one of the most sparsely populated areas in the world.

This population configuration presents compelling challenges in regards to allocation of resources, transportation and communication infrastructure, logistics, and developmental planning. Also, in regards to population density and available land mass, it must be noted that one third of the available land mass in the Marshall Islands is no longer habitable due to irradiation from U.S. nuclear testing.

Political/Economic

The parliament of the Marshall Islands, called the Nitijela, has 33 elected senators, who are elected by the people (The RMI Constitution, 1979). There is at least on Nitijela seat for each atoll and island group,. Areas with higher populations have more Nitijela seats. For example, Ailinglaplap has two elected senators, Kwajalein has three elected senators, and Majuro has 5 Nitijela seats. The senators are elected by the people of their atoll or islands. The senators in turn elect the President. The President then appoints the Cabinet ministers to handle government operations. Elections are held every four years. The first election was in 1991, the second election was conducted in 1995, and the third election was held in 1999. Amata Kabua served as the country's first president. He served a total of 17 years. Imata Kabua was the nation's second president. The current president is the Honorable Kessai Note. President Note is the first president who does not hold the customary title of Iroij.

The economy of the Marshall Islands is heavily dependent on payments made by the Compact of Free Association. The Compact was signed into both RMI and U.S. law in 1985. The Compact of Free Association was designed to foster the eventual economic self-sufficiency of the U.S. Affiliated Pacific Island nations. The Compact was implemented as an initial 15-year agreement with payments made annually to the RMI. However, it was structured to decline every 5 years. Beginning in 1989, the RMI received 53 million a year for 5 years. In 1994, this amount was reduced to 49 million a year for the second 5-year period. In 1998 the amount was again reduced to 46 million a year (Economic Report, Bank of Hawaii 2001). The Compact was amended and renewed in 2004.

Traditional Culture

The inhabitants of the Marshall Islands today are the original settlers of these island chains. There is some debate as to when the Marshall Islands were originally settled, though most references note that Marshallese society was firmly established by 1500 years ago, or about the time of Christ. Local traditions have the islands being settled around 4000 years ago, which is consistent with the estimates of some scholars (Hawaii Bank Economic Report, 1995).

The original settlers to these islands referred to these islands as "Aelon Kien Ad." 'Aelon' translates to the noun 'island.' 'Kien' indicates the plural form for Aelon, much like the 's' signifies the plural form for nouns in English. So, Aelon Kien translates to 'Islands.' The word 'ad' indicates the collective possessive form for 'islands.' So, the translation for Aelon Kien Ad comes out to be "Our Islands." This is a key concept in the native culture.

In traditional Marshallese culture land is considered both sacred and central. You cannot buy or sell land. Land is held corporately by extended clans, or 'jowi.' One's status in Marshallese society is determined by their rights in relation to land. There are three basic rights to lands, which sets up the foundation for a three-tier caste system. The land, the rights to lands, and the caste system comprise the essence of culture in Aelon Kien Ad.

The primary right is to manage the land. The family who holds this right is known as the "alab." The person within the family who holds the alab title has the authority to decide how the land is to be used, who is allowed to live where, and which side the family will take during disputes between traditional chiefs, called "iroij."

The second right on a piece of land it the right to govern. This right is known as the Iroij right. The rights of the Iroij include the settling of disputes between individuals and families on an island, settling disputes among island and atoll communities, and the distribution of food and resources from one area to another in times of need (drought, typhoon, war). The Iroij represents government on the land. The iroij is responsible to ensure the safety and well being of the lands for which the right is held.

The third right is the right to work on the land. This right is called the "dri-jerbal" right. People who have this right are almost always related to the alab family by blood. They have the right to work on the land, live on the land, and receive their livelihood from the land. In this regard, Marshallese custom seems almost like feudal Europe. Islands and tracts of land can be considered fiefdoms. Alabs can be likened to barons, as their power stems from the land. Iroij can be likened to kings, as their power stems from the alabs who recognize them. In the custom, each iroij line has

their collective set of alabs. This council of alabs is called the "Kajoor" of the Iroij. Kajoor translates to the word "power." So, the alabs are the power of the iroij. Those that have worker rights are protected and cared for by the land, the alabs who manage the lands, and the iroij with his council of alabs, or Kajoor.

There are some very complex features to this land based culture. First, in regard to an area of land, either you have a certain right to that land or you have no rights at all. If you do not have iroij, alab, or worker rights, you do not even have the right to walk on the land. A person in this situation would be called a "no-account" on that land. Unfortunate indeed is the person an island who is a "no account" on that land. He or she is at the mercy of the community. This is the closest thing that Marshallese society has to "commoners".

Second, traditional rights and titles are land based, meaning that you may be a very high ranking Iroij or alab on one island, but be a "no-account" on another island. If the "commoner" on the land in question in the previous paragraph had a mother and/or grandmother from any are of these islands and/or atolls, then he or she certainly would have iroij, alab, and/or dri-jerbel rights somewhere in Aelon Kein Ad. If you come from a maternal Marshallese line you have rights to the lands held by this line. In the culture, because of the land based nature of customary rights and titles, one can be a commoner or "no account" in one area, have alab rights in another area, and perhaps even be able to exercise iroij titles in yet another area.

Thirdly, these land rights and titles are determined at birth and by birth order. They cannot be achieved. Over the eons, as the islands were settled, either through original in-migration or in the aftermath of battle and war, areas of land was assigned to a clan or a family within a clan to manage. These are the original owners. These original owners were predominately women, as land can usually only be passed through a woman. In fact, land is thought of in the culture as if it were feminine. We come from a certain area in the same way that we come from a certain woman. Each area in these islands were taken by a woman. She was the original alab. These women were chosen by certain iroij to manage the assigned lands, or the women chose certain iroij to follow. Regardless, the iroij on that land is responsible for protection and governance of the land, and the alab is responsible for the management of the land. When the original woman passes away the alab title and responsibility passes to her children, oldest to youngest. Once the children of the original woman are deceased, the alab title passes down to the children of the original woman's daughter(s), again from eldest to youngest. The children of the original woman's son(s) lose the right for the alab title, but they obtain worker or "dri-jerbel" rights

to the land. This continues down the generations with the alab titles being passed from mother to daughters, and the dri-jerbel rights being exercised by blood relatives of the original woman. Over the eons, the descendents of the original woman comprise the "jowi" or clans, and the families which corporately exercise various rights to various lands.

The exceptions to this presentation of Marshallese culture are rare. Land is everything to these islanders. Survival itself depended upon the land. Land exists to take care of and provide for the families who eat from it and drink from it. Land cannot be bought or sold, any more than one's mother could be bought or sold. Land is not "owned" it is "held" and then it is "passed." Even then, very little land can be privately held. Usually, the land is held corporately by clans and families, with the senior persons exercising alab and/or iroij rights, and others exercising worker rights on the land. Land rights can only be changed by extreme circumstances such as the advent of war, the dying off of all the women in a certain line, and by special land grants made by an iroij for certain services rendered. Because of this, land and the complex genealogies which govern land tenure and transmission of land rights and titles down the generations, in this previously preliterate society, form the very fabric of Marshallese culture, custom, and society.

Traditional Marshallese society was neither agrarian nor industrial. Indigenous life was centered on a land oriented, cashless economy based on subsistence living. Very little agriculture was possible given the loamy, highly alkaline soil characteristic of the islands. Industrial development was not possible do to the general absence of or inability to access mineral resources. The environment in general is harsh; the temperature is hot and extremely humid, rainfall for at least half the year is scant, and the skies and seas often host erratic weather. This combination of factors, plus the remoteness of the islands relative to major trade routes and population centers served to isolate, insulate, and protect Marshallese culture during much of the advent of westernization, in much the same way manner as the spines protect a porcupine.

Forces of Change and Impact

Three major forces of change have significantly impacted psychosocial indicators in the RMI. The first force is the introduction of fermented alcohol. Like the native American Indians, islanders indigenous to the Pacific Basin area did not have technology by which to produce alcohol. Alcohol was first brought to Marshall Island society by whalers and than traders. The Germans brought beer and then the Japanese introduce sake and other kinds of rice wine. The alcoholic beverages brought by these groups were a

luxury item, and not readily available to the Marshallese populace at large, so the impact on culture was minimal. However, it was when the Americans who introduced beer as a staple (much like canned Spam) that Marshallese culture was introduced to alcohol en masse. Like their American Indian cousins, native Pacific islanders seem to lack the biogenetic mechanisms which allow for the gradual uptake and processing of alcohol. Addiction to this alcohol among Marshallese men, in particular seems to be immediate, widespread, and lifelong (for most). Because alcohol has not been present in this island society in any significant way until about 50 years ago, social mores and taboos that regulate the access and use of alcohol in other cultures, have not had time to develop. Hence, alcohol access and use is relatively unrestricted within the culture. The effects of this east meets west introduction has been devastating.

A second major impact is the conversion from a land-based economy to a monetary based economy. Although scant in mineral resources and poor in soil, these islands have been able to adequately support its population. The ocean is teeming with replenishing resources. The harvesting of trees, or agroforrestry, provided sources of starch (as in breadfruit) as well as vitamins and mineral (from fruiting trees), so the fish based diet was supplemented by land based produce. Strident resource allocation measures ensured that whatever was available was shared as widely as possible. Resources were corporately held, and the labor was communal. The introduction of a cash based economy has had enormous impact to the land based societal structure of Marshallese culture. Due to the transition into a cash economy, the culture has shifted from dependence on the land to dependence on money; from reliance on the family and clan to reliance on the job market; from dependence on land and ocean produce to dependence on imported store bought products. As with alcohol, money has not been present in the culture long enough for mores and taboos to develop and govern its use. Money is increasingly a source of friction among families.

A third major impact is the massive transition from outlying to urban areas. Traditional Marshallese society was spread out. If scant on resources, the islands are plenteous in terms of space. To the western mindset there is very little habitable landmass in these islands. But to the indigenous islanders, these small specks of land command huge ocean lots. It is to the ocean lots that clans belong, not to the small tracks of lands on which clans are headquartered. The widespread population served to minimize the effects of scarce nutritional resources. Conflict and competition was also minimized due to the diffuse population density. The advent of the cash economy has instigated a move from an ocean-based lifestyles to urban-based lifestyle. Seeking jobs and the advantages that westernization has brought, the majority of Marshall Islanders have exchanged their homes in

the commodious outer islands for life in the city. The majority of islanders today are reaping both the benefits and the ills that urbanization affords. The benefits are access to western education, improved health services, and the potential for a job, a house, and a car. The ills are substandard living conditions, impoverished nutrition, poor sanitation, overcrowding, increased dependency on employment, and/or the more likely scenario-dependence on relatives who are employed.

PSYCHOSOCIAL INDICATORS/RESEARCH IN MICRONESIA

Traditional Micronesian cultures had macrosocietal qualities and characteristics that ensured that islanders were able to survive and thrive in their island kingdom over eons of time. For example, traditional families organized themselves around those who required the most care, namely the young, the sick, and the elderly. The culture had characteristics such as traditional methods of conflict resolution, rule by consensus rather than competition, and strategies to ensure the maximum allocation of scarce resources, as well as land and aqua conservation mechanisms. Land estates were held corporately by extended clans, decision-making processes about the land were based on cooperation among the land based "caste" system, and most property was considered communal (within clans and/or families). By and large, there was equity of power between the genders, and respect between the generations. The resilience of the culture was most notable in seasons of drought and/or natural disaster wherein all were ensured some part of what little was available.

Every culture and society will experience indicators of social and psychological duress. Micronesia is no exception in this regard. Despite the paradise-like, idyllic veneer, traditional Micronesian societies and cultures have always included unseemly psychosocial problems, including infanticide, child neglect, clan wars and even genocide. However, a new array of psychosocial indicators seem to have co-occurred with the advent of westernization. There is no question that exposure to western institutions and lifestyle impacted traditional Micronesian culture. The forces of change discussed previously have had an apparent destabilizing effect on indigenous cultures throughout Micronesia. There are questions, however, as to how, where, and to what extent westernization has destabilized Micronesian cultural institutions and societal functioning, and the effect that this destabilization has on interpersonal and intrapersonal functioning.

Three psychosocial issues in particular, seem to have emerged in relation to contact with the west, and worsened with the on-going process

of acculturation. The last five decades have witnessed alarming increases in the psychosocial indicators of substance abuse, family violence, and suicide. These three areas draw scrutiny both not only because of the devastating effect on Micronesian families, communities, and society caused by these problems, but also because these problems were not known to be issues of serious relevance prior to intercourse with the west.

Suicide

For instance, suicide was so rare in traditional Marshallese culture that there is no original word in the Marshallese lexicon for it. The word used today for suicide is "Klava." This is the name of the first person in contemporary and popular Marshallese history to take his own life. Klava was a man identified as having leprosy in the 1950's. The policy at that time (during the Trust Territory days) was to relocate identified victims of leprosy to a leper's colony on Saipan. En route to the colony, Klava hung himself to avoid being separated from friends and loved ones. Today, in colloquial Marshallese, the word Klava is used as a synonym for suicide. Despite the absence of suicide in the Marshallese lexicon, klava has become so common in the Marshall Islands that it is a leading cause of death for some age groups.

Substance Abuse

Alcohol abuse is another case in point. The Marshall Islands is one of the few societies on earth that did not distill or ferment alcohol from local products. There was no alcohol available to use or abuse until first introduced by the early traders and whalers, then the Germans, the Japanese, and finally the Americans. The status of alcohol has been transformed from its relative absence in islander culture, to one of being the leading contributor to community, health, social, and psychological problems. Also absent from traditional Marshallese culture until 50 some years ago was the regular availability of cigarettes and tobacco products. There were no other mood altering or mind-altering substances available until the very recent past, and the presence of such is still rare in the RMI today.

Violence

Violence has always been a part of islander civilization. As noted, occurrences of violence have included infanticide and even genocide in traditional Micronesian societies. These acts of violence, however, were most often linked to on-going attempts at survival. Micronesia is comprised of areas which are scant is some resources necessary for survival. Seasonal

patterns and natural disasters worsen chances of survival. This combination of dynamics sometimes resulted in fierce competition for scare resources at various periods of time in the islands.

However, the prevalence of, function of, and expression of violence in island communities has been transformed in contemporary Micronesian societies. No longer is it the function of violence to ensure survival of the family, clan, and community against outside threats. Violence itself has become a threat to the members of one's own clan, family, and community. Incidents of child abuse, spouse abuse, and abuse among family and community members, once considered rare, are today virtually commonplace.

Research on Psychosocial Indicators in Micronesia

The impact of westernization, in regard to these psychosocial indicators, has drawn the attention of the social sciences. The Micronesia arena, in general, has been the focus of scholarly attention even before the emergence of widespread problems with substance abuse, violence, and suicide. At first, the exotic cultures and the paradise-like quality of islander life attracted anthropologists from a variety of specialty areas. As psychosocial problems began to emerge, these problems became the focus of specialized anthropological research. As these problems became epidemic and then pandemic, anthropologists and other social scientists began to utilize research paradigms and methodology from their various disciplines within the social sciences to try to bring scientific understanding relevant to these psychosocial problems to bear, with the optimistic, scholarly, and altruistic goal of assisting with the re-stabilization of these island communities and societies.

Scholarly work from the American Anthropological community, (versus the European Anthropological community, and/or other social sciences from either America or otherwise) dominated research activity in Micronesia over the last number of decades. An extraordinary and comprehensive review of the scholarly anthropological research in Micronesia conducted over the last number of decades is summarized in a recently published book entitled *American Anthropology in Micronesia*, edited by Kiste & Marshall (1999).

The work of two anthropologists has dominated scholarly research in regard to the psychosocial indicators of interest in this project, namely substance abuse, family violence, and suicide. Dr. Donald Rubinstein has made vital and important theoretical and research contributions most notably in the area of suicide and youth delinquency. Father X. Hezel has consistently and energetically applied anthropological paradigms and methodology against the rising tides of substance abuse, suicide, and family violence in

Micronesia. While it is beyond the scope of this project to review the context shaping contributions of these two scholars, the following quote from Fr. Hezel cogently summarizes this body of work, and the input thereof, in regard to psychosocial issues in Micronesia. (Kiste & Marshall, 1999, p. 325).

> "These same . . . changes, particularly in the extended family brought about the problems surveyed . . . and . . . will probably create problems in years to come. But, we may expect that they will provoke less anxiety then the earlier set of problems if only because they will be viewed in their cultural context and not as signs of the imminent ruin of society. In this respect as in many others, social problems in Micronesia has been changed by anthropology for all."

The contribution of this cadre of notable social scientists working on Micronesian empirical issues over the last number of decades is undeniable and invaluable. As alluded to by Father Hezel in the preceding quote, perhaps the greatest contribution of these distinguished scholars has been one of defining the stability and resilience of culture in relation to the psychosocial tasks at hand. Perhaps the second most important contribution of the body of work done to date is to directly establish the need for culture specific approaches for understanding and addressing psychosocial issues in Micronesia. Cultures in the Pacific Basin are unique, but like cultures everywhere else in the world, it is the "task" of culture, as it were, to ensure the survival and prosperity of its members. As indicated in the scholarly literature generated by focus on these psychosocial issues, Marshallese culture, like the others in Micronesia, has its resources and it's strengths, it's psychosocial tasks at hand, and its work cut out for it.

To close this section, in my capacity as an indigenous Micronesian social scientist, I would like to commend, applaud, and express the collective gratitude of our islands for the efforts of these esteemed social scientists who, over the last number of decades have set the standard for social science research in the small island nations in our part of the Pacific Ocean.

THE PRESENT STUDY: EPIDEMIOLOGICAL SURVEY

Notwithstanding the significant contributions made to date, as we enter the 21st century, there remain considerable gaps and unresolved empirical questions remaining in regard to the psychosocial issues of substance abuse, family violence, and suicide in Micronesia. A new generation of social science initiatives must be undertaken if "paradise" is indeed to be "reclaimed."

Following the February 2000 Conference hosted by the Psychology Department of the University of Hawaii at Manoa, entitled the *Pacific Island Epidemiological Monitoring and Psychosocial Research and Training Project*, the non-government organization entitled AKTS.inc began the process of implementing an epidemiological surveillance system to monitor psychosocial indicators of substance abuse, family violence, and suicide in RMI.

Results

Epidemiological/Psychosocial Needs in RMI. The RMI needs technical support to implement basic data gathering infrastructure to allow for nationwide epidemiological monitoring and surveillance of the psychosocial indicators of suicide, violence, and substance abuse. At present, the internal capability to capture and track data varies widely across psychosocial indices. Suicide, unfortunately, is the easiest data set to develop as the occurrence of such is so visible within the community. Data capability in regard to experiences of violence is weaker than for suicide, but more developed than for substance abuse. Data gathering and tracking capability in regard to substance abuse is extremely weak at present, and little confidence can be placed on available data collected to date.

There is interest within the RMI (via AKTS.inc and the RMI Association of Counselors) in working in cooperation with epidemiological and psychosocial research specialist within the region and at the University of Hawaii to strengthen data-related infrastructure across the varying psychosocial areas within the RMI. A brief presentation of areas of need is made for each psychosocial indicator, below.

Analyses of Suicide Data. Due, in part to efforts originally started by Father Hezel, and subsequently carried on by the Departments of Human services on Majuro and Ebeye, a composite of data has been compiled on completed suicides for one complete decade (1990–2000). This information has been formatted into an epidemiological framework herein to show the number of suicides per year per geographical area. In reviewing the data it is important to note that, first off, each suicide recorded on this table represents a tragedy. With that in mind, we would like to work with the University of Hawaii to conduct various statistical analyses on this data so as to guide programs and policies in this area. A few of the empirical questions in which we are interested are detailed below. RMI lacks the technical resources to conduct the analyses on its own.

Research Activity # 1. Conduct a Trend Analysis for Suicides across years 1990–2000. Again, the Micronesia Seminar has conducted some of

Table 9.1. Completed Suicides in RMI 1990–2000

	Majuro	Ebeye	Outer Islands	Total
FY 1990	8	8	1	17
FY 1991	8	2	0	10
FY 1992	4	4	0	8
FY 1993	12	0	1	13
FY 1994	8	4	2	14
FY 1995	7	3	2	12
FY 1996	5	2	0	7
FY 1997	11	2	1	14
FY 1998	4	2	0	6
FY 1999	4	0	0	4
FY 2000	4	3	0	7
FY 2001	*Jan–March only*			**8**

the most comprehensive suicide data to date (Table 9.1). However, the research on this data conducted to date has not employed total numbers of suicides per year, and then compared the trend across years. Suicides were grouped across multiple year periods selected in what seems to be an arbitrary fashion.

This approach has two drawbacks in regard to epidemiological monitoring. First, in regards to surveillance, standard epidemiological methodology tracks indicators on a daily, monthly, annual, and decadal basis. This allows for standardized cross-site comparisons in "real time" periods. Grouping suicide data into arbitrarily selected multiple year blocks prohibits the comparison of RMI data with data being tracked in other epidemiological sites. Second, collapsing continuous data into categorical groups results in a loss of statistical power to discern differences between groups when differences exist. For example, if Ebeye had higher suicide rates than Majuro for a certain number time frame, analyses can be run to ascertain if these differences are statistically significant, or attributable only to chance. Grouping multiple years into categories and then running the analyses reducing the chances of discerning group differences (i.e. between Majuro and Ebeye) when group differences exist.

Research Activity #2. Conduct statistical analyses to ascertain whether group differences exist among the three population centers, Majuro, Ebeye, and the collective outer islands. Suicide has been bad everywhere, but is there statistical indication that it has been worse in some area within RMI? If so, this information could be used to guide programs and policy.

Table 9.2. Child Abuse and Neglect in the Marshall Islands. New Referrals to Social Work Program-Department of Human Services Calendar Year by Type of Abuse/Neglect

	Malnutrition	Medical neglect	Supervision neglect	Child death	Child abuse/ emotional	Child abuse physical	Child abuse sexual	Total
1992	96	4	2	9		3	2	102
1993	56	2		7		2	1	59
1994	68	2	1	1	2	4	3	77
1995	55	2	2					55
1996	49				2	1	1	53
1997	39	5	4	1	1		2	42
1998	42		4			3	5	50
1999	19	1		2		2	4	26
Total	424	16	13	20	5	15	18	464

Research Activity #3. Conduct a trend analysis for total suicides per month across the 10-year period for which data is available. Local wisdom indicates that suicide incidences increase after the Christmas and New Year holidays, and then again during graduation seasons. It may be that there is a significant "time effect" in place in regard to suicide within the RMI. The rise is suicide rates after the holidays would be consistent with what is indicated by epidemiological tracking of suicide in the states. If there is indeed a statistically verified increase in suicides at certain times within RMI, this information can again guide policy and program development.

Research Activity #4. Convert the raw suicide data to standardized suicide rate (number of suicides per 100,000 population) data per year. Converting the raw number of total suicides into a standardized rate is necessary to allow for comparisons across site and across time. The population of each country is used in the calculation of the standardized rate. The RMI population, like most national populations, increases each year. To ensure that suicide raw data (presented in the above table) is accurately converted into suicide rate, accurate population figures must be used. Assuming that the mid-year census population figure for each year is used in the denominator, here is the dilemma. It is not clear whether the mid-year census figure was used per year, as the data was collapsed across multiple year blocks. Also, even if the mid-year census figures were used, the population figures used were probably taken from the 1988 census. The RMI had a very high projected population growth rate (4.2%) at the time of the 1988 census. It is now known that the population growth rate was erroneously inflated. The midyear census figures, if used, would be based on this erroneous projection. This statistical artifact would make the denominator

artificially high, yielding a standardized suicide rate,which would be artificially low. The suicide situation in RMI is probably worse than has been reported to date.

The 1999 census indicated a population growth rate at 1.5%. Using a midyear census figure based on this rate would initially show higher standardized suicide rates, but would be more sensitive to capturing increases and decreases in suicide related to program efforts. This adjustment would also be beneficial in that it would yield a higher level of (statistical) confidence for suicide rate data, if such is to be used in the trend analyses and group comparisons discussed previously.

Research Activity #5. Conduct a cross-site comparison of the RMI with its Pacific Basin neighbors. The analysis should be suicide rates per year across sites. Care should be exercised to ensure that suicide rate data is developed in a manner consistent across sites, and consistent with standard epidemiological practices so as to ensure the higher level of confidence possible.

Research Activity #6. Conduct an empirical evaluation of the impact of a suicide prevention initiative funded by the World Health Organization (WHO) and conducted by the RMI National Suicide Prevention Committee. As can be seen on the table, there was a marked rise in suicide in 1997. In response to this, a National Suicide Prevention Committee was convened and funding was solicited from the WHO was solicited for an RMI National Suicide Prevention project. This committee has multi-sector representation inclusive of health, education, social services, church, family, clients, private sector, and a non-government organization. The National Suicide Prevention Committee, with technical support from AKTS.inc organized a three-day Suicide Prevention conference to be held on Majuro and then repeated on Ebeye in late 1997, early 1998. Key persons from these urban centers and each of the outer islands were brought in for training and national planning efforts. As follow-up to these conferences, suicide prevention training was conducted via the Ministry of Health & Environment to help implement family support groups. Related to these activities was the formation of the RMI Mental Health Family Support Group-which is the first efforts of its kind in the RMI.

The suicide data presented in the preceding table was developed as an epidemiological tracking mechanism under this national WHO-RMI project. Without this reformatted data, meaningful incidence and prevalence data was not accessible for policy nor for evaluation of programs and projects. With this—even rudimentary-system in place, program evaluation and trend analyses are possible. As can be seen from the table, 1998

witnessed an immediate decline in suicide. There were 6 suicides committed in 1998 compared to 14 in 1997. This represents a remarkable decrease in suicide incidents and prevalence. This optimistic trend continued into 1999- a year in which there were no suicides on Ebeye, no suicides in the outer islands, and the number of committed suicides on Majuro was down to an all time low of 4.

Because this epidemiological tracking system is still in place, it was possible to capture a rise in suicides toward the end of the decade. In FY 2000 the number of suicides rose to 7. This is almost a 100% increase of the raw number of suicides reported for FY 1999. And it gets worse. This year, just from January until March 2001, there had already been 8 reported committed suicides. This was cause for alarm, and appropriate alarms were sounded. Aggressive suicide prevention and outreach was conducted by multiple sectors, as reported in local newspaper articles.

Research Activity #7. Work with the local workgroup (the RMI Association of Counselors, and AKTS.inc) to develop, prepare, and submit for publication in a scholarly journal the results of the six psychosocial epidemiological research activities listed above.

NEEDS

Development of Violence Data Sets

The RMI Association of Counselors needs assistance with developing epidemiology-based data sets for violence indicators. A rudimentary framework is in place within at least one sector of RMI (the Human Service sector) which has been routinely recording some data since 1992 related to child abuse and neglect. The Social Work program within the Department of Human Services is the site designated within the RMI to receive referrals for child abuse and neglect, including malnutrition. New referrals by type per year received by this program is presented in Appendix L. Staff from the Social Work program are represented in the RMI Association of Counselors.

There are shortcomings with the existing child abuse and neglect data, of course. Only referrals are currently being tracked. The entire process of "referring" across and into service agencies is still in it's infancy, and basically remains a foreign concept in the Marshallese mindset. Some of the data (such as child death related to malnutrition and/or other kinds of abuse and neglect) is fairly reliable. Other data, like emotional neglect and physical abuse needs to be reviewed with caution, due to the subjective nature of these constructs. Also absent are data sets from other sectors

pertaining to violence. Especially critical is data from the health and justice sectors related to violence-related arrests and hospital admissions. This may be available, but it is hard to access. There is no system in place which allows data to cycle to data users across sectors. Also, there is no good system currently in place to capture data related to violence against women, and substance abuse related violence. Data is also not routinely available in a format that compares groups across sub-geographical areas (Majuro versus Ebeye versus the outer islands.).

In general, at presence, there is no reliable epidemiological based incidence and prevalence date for RMI in regards to violence. Data from all relevant sectors would need to be identified and/or established, and a data cycling system must be set in place if a comprehensive epidemiological surveillance systems is to be implemented for violence indicators. The RMI needs technical support if this infrastructure is to be set in place.

Development of Substance Abuse Data Sets

A Needs Assessment for Substance Abuse was conducted in the RMI by the Micronesian Seminar in 1997, funded by the Center for Substance Abuse Treatment (CSAT), which is operated under the auspices of the U.S. Substance Abuse and Mental Health Services Administration. The results of the assessment are available in the document entitled *Alcohol and Drug Use in the Republic of the Marshall Islands; and Assessment of the Problem with Implications for Prevention and Treatment* (Hezel, 1997). As with other seminal research project conducted by the Micronesian Seminar, the substance abuse needs assessment does an exceptional job of defining the cultural parameters and context related to substance abuse in Micronesia. The importance of understanding this context cannot be overstated. This project also presents excellent data on alcohol-related arrests, alcohol related hospitalizations, and alcohol related suicides in the Marshall Islands. This data is presented as totals by year in tabular format in the report document, and as such nicely sets the stage for the development of epidemiological analyses.

There are some major weaknesses, however. The tabular data collected on indicator (i.e. alcohol related arrests) by year is not converted to rate data (per 100,000 population), so trends are not readily apparent in the study. The data would need to be converted to rate data (correcting for mid-year population per year) to be able to assess trends. Also rate data per year would need to be developed for the sub-geographical areas (Majuro versus Ebeye versus outer islands) if it is to be useful as a tool for guiding policies and programs. Finally, the study employed key informant

methodology rather than standard epidemiological methods, and as such the results are sensitive to several types of statistical bias. As random sampling was not used, the results of the study cannot be considered general for the population of the Marshall Islands with any degree of statistical confidence.

Such is the state of affairs in regard to substance abuse data. In general, there is an absence of valid and reliable (in the statistical sense) data. Incidence and prevalence data related to substance abuse is not routinely tracked, monitored, and/or reported. Much assistance is needed to develop an epidemiological based data tracking, monitoring, and surveillance system for substance use and abuse indicators in the RMI. Without such, any meaningful psychosocial research projects and studies will be handicapped, as it is a fair statistical "bet" that substance abuse is highly correlated to other indicators such as violence and suicide.

RECOMMENDATIONS

The RMI workgroup for the Pacific Islands' Epidemiological Monitoring and Psychosocial Research Project, hereafter known as the RMI Association of Counselors would like to contribute the following 5 recommendations:

- Continue to support of the Psychology Department at the University of Hawaii as the regional technical support site to develop and implement an epidemiological surveillance and monitoring system throughout the U.S. Affiliated Pacific Island Jurisdictions, and other interested Pacific Island areas.
- The UH Technical Support site to assist identified research workgroups within each island or area to develop and establish epidemiological monitoring infrastructure which captures, records, and reports data across sectors (health, education, justice) related to substance abuse, suicide, and violence.
- The UH Technical Support site to work with local research workgroups to develop data bases in which to house data collected from psychosocial epidemiological efforts in regard to psychosocial indicators in the Pacific (past and present.). This database should be made available for current and future researchers and social scientists.
- The UH Technical Support site to work with the RMI Association of Counselors to conduct research activities detailed in section 3 and section 4 of this Report.

- **Conduct an epidemiology-based, psychosocial research project in RMI.** As one output from this regional initiative, a research project has been developed to be conducted within the RMI, which might be suitable for replication elsewhere in the Pacific Basin. With support from the NGO-AKTS.inc, the RMI Association of Counselors has agreed to serve as the coordinating site for this project. It is hoped that the UH can provide technical support in regard to project supervision, data analysis, and possible publishing of the results generated from the study.

This proposed project has the expressed goal of building upon the foundation set by social science scholars to date in regard to psychosocial indicators in Micronesia, by bridging gaps in theory and methodology so as to address lingering psychosocial related empirical questions. To accomplish this, it is necessary to involve research strategies and paradigms from various disciplines within the social science arena. In this goal is the recognition that these psychosocial issues are extremely complex, and to date have by and large eluded empirical attempts to understand, predict, prevent, and address these issues in any efficacious way within Micronesia. The time has come to acknowledge that a multisector, multidisciplinary, collaborative approach is needed if empirical headway is to be made in these areas. This project has been developed with this realization in mind.

A (Micronesian) culture-specific survey instrument has been developed for use in this study, responsive to aforementioned concerns with current survey instruments and methodology. The project is to be entitled: *An Epidemiological Survey of Cultural Wellness, Substance Abuse, Violence and Suicide Among RMI Youth: A Multivariate Model Employing a Predictive Approach.* The survey project is intended to build upon the foundation of previous generations of social science research of psychosocial indicators in Micronesia and to strengthen this body of literature in five specific ways:

(1) The study will be longitudinal in nature so as to employ an epidemiological focus. In this regard, it is envisioned that a psychosocial survey will be developed and administered annually. The study will also (annually) solicit cross sectional cohort data. As such, it is envisioned that the survey will be given at the 8th grade level, the 12th grade level, and upon entrance to CMI. The combination of these features would be that data regarding the incidence and prevalence of substance use, substance abuse, experience of violence, and suicidal ideation, affect, and behaviors will be generated across age groups each year. If properly implemented,

this epidemiology-based initiative could serve as an early warning system for program and policy areas, and provide an important source of on-going data for researchers.

(2) The study will be theory driven, borrowing heavily from constructs existing in the established psychosocial literature, such as anomie, cultural disintegration, urbanization, overcrowding, etc. However, design of the study will which attempt to include macrosocietal variables (i.e. urbanization, traditional family break-up) side by side within the same theoretical model as psychological variables (wellness, anomie).

(3) Rather than attempting to resolve questions of "causation," of substance abuse, suicide, and violence, which are not resolvable with the statistical techniques social scientists have at their disposal, (not to mention the ethical constraints) empirical attention will focus on "prediction." Predictive models (i.e. regression analyses, and multivariate approaches) will be used to examine the role of macrosocietal variables as distal predictors, and other "micro" variables (social, family, individual, psychological variables) as more proximal predictors of psychosocial issues of interest. For example, it may be that overcrowding (a macrosocietal variable) may predict a decrease in wellness (or increase in anomie) which in turn predicts a risk profile for substance abuse, experiences of violence, and suicide.

(4) The study will employ a construct/variable related to "cultural wellness." Much attention has been given in the research to cultural erosion, and its facsimiles, but little attention has been given to cultural resilience and stability. In this study, cultural wellness is defined as participation in cultural activities that are traditional (weaving, ocean-related activities, attendance at feasts, grieving ceremonies, etc) as well as cultural activities that are contemporary (attendance of sporting events, barbecues, church, etc.). In the model being developed for empirical testing, cultural wellness is conceptualized as a buffer or moderating variable.

(5) To strengthen confidence in statistically discernable findings, a priori empirical hypotheses (rather than post hoc) will be generated, then tested, then accepted or rejected as dictated by the data.

FINAL THOUGHT

Final thoughts on this psychosocial project in relation to past and future efforts on epidemiological surveillance of psychosocial initiates in

the Pacific:

Paradise Regained?
The Time has come
the Islands said,
to speak of many things...
of basic needs
of times gone by
and what the future brings
and why our seas are rising high
and what these things might mean.

—Michael Jenkins

Appendix A

Historical Timeline for the Republic of the Marshall Islands

2000BC	There is evidence to suggest that the Marshall Islands have been inhabited for more than 2000 years. The islands were ruled by feudal states at war with one another. Chiefs ruled the states. These early people were superb canoe builders.
1526	Europeans first see Taongi, the northernmost atoll.
1566	One dozen Spanish are marooned on Ujelang (an atoll in the Marshall Islands) following a mutiny.
1592	The Marshall Islands are formally claimed by Spain. Although the islands are "claimed", no further contact of settlement occurred
1788	Captain John Marshall and Captain Thomas Gilbert sighted Mili, Arno, Majuro, Maloelap, Erikub, and Wotje Atolls on their route from Botany Bay to China.
1820s	American whalers visit the Marshall islands for food and water.
1850s	German trading companies are active in the Marshall Islands.
1860s	American and Hawaiian Protestant missionaries settle in the Marshall Islands.
1878	Jaluit in the Marshall Islands becomes a German protectorate by a treaty with island chiefs. A trading station is set up there.
1886	In an agreement with Great Britain, all of the islands in the Marshall Islands become German protectorates. The Spanish, seeking to retain their earlier claim to the islands, ask for and are granted sovereignty over the Marshall Islands by the Catholic Church under Pope Leo XIII. The Church maintains Germany's right to trade in the area.
1899	The German-Spanish treaty gives Germany control over the Marshall Islands.
1914	During World War I, the Japanese occupy all of Germany's territory in Micronesia including the Marshall Islands, the Federated States of Micronesia, Palau, and the Northern Mariana Islands.
1920	The League of Nations mandates that Japan assume responsibility for administration of the Micronesian territories it took from Germany. Japanese colonization occurs and infrastructure is created.
1935	Japan withdraws from the League of Nations. Military preparations for World War II are made in the Marshall Islands.

(*Continued*)

Appendix A (*Cont.*)

1944	During World War II, the United States captures the Marshall Islands from the Japanese.
1946	Americans use Bikini Atoll in the Marshall Islands for atomic bomb tests. The indigenous people of Bikini are relocated to Rongerik . Bombing continues until 1958.
1947	The United Nations include the Marshall Islands in the Trust Territory of the Pacific Islands which is to be administered by the U.S. Enewetak Atoll was used for further atomic bomb testing. Enewetak's 146 indigenous residents were moved to Ujelang.
1954	The first hydrogen bomb is exploded on Enetewak. Further hydrogen bomb tests are carried out every two years until 1962.
1961	Kwajalein Atoll in the Marshall Islands is being used for as a military base. The indigenous people of Kwajalein are resettled at Ebeye.
1968	Bikini Atoll is declared fit for human habitation.
1971	140 Bikinians return to their island after debris had been cleared away.
1976	Enewetak Atoll is formally returned to its inhabitants and a $20 million clean-up program is attempted over the next 3 years.
1977	After a $3 million decontamination project, Bikini's groundwater, coconuts, fruit, vegetables, and soil are still too radioactive for human consumption. U.S. Department of the interior gets $15 million from Congress to again move the Bikinians off their island. Most of the Bikini survivors continue to live in the Marshall Islands on Kili, Majuro, and Ebeye. Estimates suggest that Bikini will be uninhabitable for at least 30 to 90 years.
1978	Marshall Islanders reject the proposal that they become a federal Micronesian state in conjunction with the other Micronesian islands included in the Trust Territory.
1979	Marshall Islanders draft and put into effect their own Constitution.
1980	Americans dig a huge pit on Runit in Enetewak Atoll and bury 84,150 cubic meters of radioactive sand and debris mixed with cement. They build a concrete dome over the pile, and estimate that the contents of the pit will remain radioactive for 25,000 years. 550 indigenous people of Enetewak return to their island from Ujelang. Inhabitants of Rongelap and Utrik, 160 km away from Bikini are developing thyroid problem as a result of the 1954 blast.
1983	A plebiscite in the Marshall Islands approved the Compact of Free Association with the U.S. which was ratified by U.S. Congress. The Compact stipulated that the U.S. retained responsibility for defense and the right to use the missile-testing range at Kwajalein. The Marshall Islands were to receive $700 million in economic aid over 15 years and the right to self-government. Overcrowding at Ebeye as a result of the Kwajalein relocation causes increases in crime, suicide, and death from malnutrition in children.
1984	Amata Kabua is elected the first President of the Republic of the Marshall Islands. He is re-elected in '88, '92, and '95.
1985	The entire population of Rongelap Atoll, which had been engulfed in nuclear fall-out from the tests at Bikini in 1954, was resettled on Mejato Atoll because of dangerous radiation levels.
1986	The UN trusteeship in the Pacific was terminated and the Compact of Free Association came into effect. Under the terms of the Compact, the U.S. established a $150 million fund to settle claims against the U.S. resulting from testing of nuclear weapons between 1940 and 1950.

1988	Violent crime in the Marshall Islands is increased by 65% between 1988–1991.
1989	The Supreme Court rules that the Compact of Free Association prevented islanders from suing the U.S. for any further compensation.
1990	Further compensation was approved for Marshall Islanders. 5000 islanders sought compensation, 380 were granted compensation although only one-fourth of those promised compensation were paid by 1993.
1991	The Republic of the Marshall Islands becomes a member of the United Nations.
1994	The Marshall Island legislature demands detailed information from the U.S. on the effects of nuclear testing in the islands. Conclusive evidence of deliberate exposure to radiation in order to gain data about its effects on health was found.
1995	The indigenous people of Enewetak Atoll campaign for compensation from that fund for loss of the complete or partial vaporization of 5 of their islands. Nuclear debris from the concrete dome on Runit is beginning to leak out. Further evidence of the U.S. withholding medical records of Marshall Islanders involved in radiation experiments emerges. Japanese scientists release a report indicating that 40% of the former residents of Rongelap Atoll have cancer.
1997	The Nuclear Claims Tribunal ruled that compensation from the U.S. was not enough to meet the health needs of Marshall Islanders affected by nuclear testing. A group of Bikini Islanders returned to their atoll to aid in the land rehabilitation process.
2004	Compact of association amended and renewed.

REFERENCES

Brunner, B. (Ed.). (1999). *The Time Almanac 2000*. Boston: Time Inc.

CIA Factbook (2004). www.cia.gov/cia/publications/factbook/html

Europa *Year Book: The Far East and Australia* (1999). London: Europa Publications Ltd.

Famighette, R. (Ed.). (1999). *The World Almanac and Book of Facts*. New Jersey: World Almanac Books.

Hezel, F.X., Rubinstein, D.H. (1989). *Micronesian Seminar*. FSM: Author.

Levinson, D., Ember, M. (Eds.). (1999). *Encyclopedia of Cultural Anthropology*. New York: Henry Hold Corporation.

Lal Brij, K.F. (2000). *The Pacific Islands*. China: University of Hawaii Press.

Ness, I., Ciment, J. (1999). *The Encyclopedia of Global Population*. Chicago: Fitzroy Dearborn Publishers.

Pacific Islands Yearbook (17th ed.). (1994). Sydney: Pacific Publications.

Spennemann, D.H.R., Ennaanin, E. (1993). A collection of essays on the marshallese past. *Marshall Islands Culture and History. Series F: Technical Studies and Miscellaneous. Vol.!.* Majuro: Historic Preservation Office.

World Book Encyclopedia (2000). Illinois: World Book Inc.

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Chapter 10

Alcohol and Drug Use in Honiara, Solomon Islands

A Cause for Concern

Rolf Kuschel, 'Angikinui Francis T. Takiika, and Kiu 'Angiki

INTRODUCTION

The pervasive use of tobacco and psychoactive substances is becoming an increasing problem in the Solomon Islands. The change from a traditional betel chewing community to a society with multi-substance use and abuse gathered momentum after the Second World War. When in 1987 Bennett published her historical account of the Solomon Islands history from 1800–1978 she refers to the introduction of tobacco and alcohol by whalers and traders in the 19th century. With the exception of betel nuts, there is not a single reference to the consumption of neither marijuana or other drugs. Simply, because at that time these substances were unknown among the islanders. Later, Donner could reveal that the process for fermenting toddy had been introduced to Sikaiana by some Kiribati refugees in the late 19th century. Since then the use of alcohol and tobacco has gradually increased without any serious intervention by neither the government, health and educational authorities, nor by the many churches and missions. In the 1990's marijuana, cocaine, heroin, hallucinogenic plant drugs and the misuse of prescription- and nonprescription drugs appeared on the drug scene. Especially the use of marijuana has exploded. A young Solomon Islander, who had been overseas for several years describes his great surprise when

in 1996 he returned to Honiara, the capital of the Solomon Islands, and saw how many young people were hanging around smoking marijuana, and drinking home brew.

Despite the grave development in the increase of substance use and abuse in the Solomon Islands, until now no research has been conducted to unravel the amount and kind of alcohol and drug consumption and its socio-economic consequences. Politicians, church leaders, police officers, and the local people express their concern, but still nobody has taken the responsibility to identify the core problems behind the explosive increase in psychoactive substances consummated by the young people.

The information presented here are based on data collected by The Federation of Solomon Islands Youth (FOSIY)—founded by one of the authors, Takiika. The program deals with the alcohol and drug problems found among the young, uneducated people who live in and around Honiara. Many of whom are involved in crime, prostitution and drug peddling. In the present paper a general outline is given of the contemporary situation of alcohol and drug use an abuse in and around Honiara, the kind of substances available, patterns of consumption and the problems related to the intake of psychoactive substances. Specific attention is given to structural violence and health problems like venereal diseases and the almost epidemic development of prostitution related to substance use.

Though the ethnic conflicts on Guadalcanal prevented the authors to collect empirical data on the topic under scrutiny, the paper draws a clear picture of an ongoing cultural disintegration where over the next years one probably will see a significantly increase in the morbidity and mortality rate due to the intake of tobacco and psychoactive substances. Social deviations, of which some already can be seen, will also increase unless those people who have the means to counteract this development take the responsibility given to them seriously.

Geography and Climate

The Solomon Islands, a scattered archipelago of mountainous islands and low-lying coral atolls is after New Zealand and Papua New Guinea the largest land mass in the South-West Pacific. The main islands extend from Choiseul in the north through the New Georgia Group, Santa Isabel, Guadalcanal, Malaita to San Christobal (Makira) and the Santa Cruz Group in the south (Table 10.1).

Once or twice a year the islands are struck by cyclones. They can be very devastating like cyclone Namu that hit the Solomons in 1986 and which took the lives of 140 people. Several hundred earthquakes are

Table 10.1. Facts about the Solomon Islands

Geographical coordinates:	
Latitudes 5°10′ and 12°45′south and longitudes 155°30′ and 170°30′ east (UNDP, 1986).	
Area:	
Total land area: 27.540 km^2 (http, 2001).	
Islands:	
Total number of islands: 992	
Populated islands: 347 (Honan et al., 1997:19).	
Main Melanesian Islands:	
Choiseul, Guadalcanal, Malaita, Makira (San Cristobal), Santa Isabel, New Georgia.	
Polynesian Outliers:	
Anuta, Bellona, Ontong Java, Reef Islands, Rennell, Sikaiana, Tikopia.	
Highest mountain:	
Mt. Makarakomburu on Guadalcanal, 2,447 meters (http, 2001).	
Natural hazards:	
Cyclones, earthquakes, volcanic activities.	
Land use 1993 estimate: (http, 2001)	
Arable land:	1 %
Permanent crops:	1 %
Permanent pastures:	1 %
Forests and woodland:	88 %
Other:	9 %
Natural resources:	
Fish, forest, gold, bauxite, phosphates, lead, zinc, nickel, lead.	
Population:	
1995: 367,800	
Population growth rate:	
3,24% (1998 est.)	

reported in one year and not infrequently they measure up to five on the Richter scale. The heavy deforestation that has taken place during the last decades now releases soil erosion. Large stretches of land for plantation crops or mechanized agriculture is rare, the Plains on Guadalcanal being one of the few exceptions. Much of the land is still covered with forest. Of other natural resources the Solomon Islands is rich in coconuts and fish, and minerals as gold, zinc, nickel and lead, as well as phosphate and bauxite.

According to Green (1977:13) archaeological and linguistic research suggest that "4000 years seems a safe minimum estimate for the beginnings of permanent settlement of the Solomons by societies with horticultural economies." Traces of the oldest village found so far dates back 3.500 years.

The traditional food, styles of canoes and crafts indicate that the main population, the Austronesians (Melanesians), arrived from Papua New Guinea and originated in mainland south East Asia. The other ethnic

group, the Polynesians living on the outlying islands, appear to have a common origin in the main Polynesian Islands around the Tonga-Samoa archipelagoes including Futuna and 'Uvea (Kirch, 2000:214). From here they migrated in all directions of the Pacific Ocean.

Contact with the Outside World

"One day, long ago, a man was fishing on the reef, and he saw something out in the sea. It appeared to be an island, but it moved. He ran to the beach shouting. 'An island is coming here', and quickly the people gathered on the beach to watch a sailing ship approach and anchor off the reef. The inhabitants of the island came ashore, and our island world ceased to be" (Casper Luana, here quoted from Bennett, 1987:21).

In the middle of the sixteenth century, after New Guinea and the Spice Islands had been discovered by Europeans, rumors circulated about the existence of some very rich islands not too far away. In 1567 a Spanish fleet under the command of Alvaro de Mendaña set out to find these islands. He reached Santa Isabel in February 1568. A cross was planted at Puerto de la Cruz on Guadalcanal, the site of Honiara's present port, with the aim of establishing a settlement. The name Solomon appears for the first time in a letter dated 20 March 1569. It was written by Juan de Oroscois, who named the new European discoveries 'The Isle of Solomon' to let people associate to King Solomon's mines from where gold was brought to adorn the Temple of Jerusalem. Mendaña returned to the Solomons in September 1595, only to die a month later. The following 250 years saw a few more European expeditions reaching the Solomons.

Early in the 19th century traders and whalers visited the Solomon Islands including some sandalwooders from Vanuatu (then New Hebrides). They came to trade iron goods (nails, axes, tomahawks) and glass bottles for food, water, timber, tortoise- and pearl shells, sperm- and coconut oil, copra, bêche-de-mere, ivory nuts and women. Sometimes traders would persuade villagers to cut huge loads of sandalwood. Instead of paying for it the traders shot the villagers. As Harold M. Ross (here quoted from Bennett, 1987:45) said: "Traders put into Melanesian ports, taking what they wanted by force." Contact with the whalers and traders often left the local population with influenza, measles, and chicken pox. These diseases often decimated the local population. Fear and anger towards the intruders were build up, and killings of white people appeared. Thus, the Solomon Islanders quickly became known as a most ferocious people.

In the wake of the traders and whalers also came missionaries. The introduction of Christianity was not unproblematic. In 1845 Catholic missionaries made the first attempt to Christianize the local people. Their

Bishop Epalle was mortally wounded on Santa Isabel, three other missionaries were killed on San Christobal and the mission was abandoned within two years. In 1871 the Anglican Bishop John Coleridge Patteson was murdered on Nukapu Island and in 1910 two South Sea Evangelical Missionaries were killed on Rennell Island.

Rapid changes occurred after 1875 with the introduction of copra production and the growing demand for laborers in the cotton and sugar plantations in Fiji and Queensland. Between 1870–1910 some 30,000 Solomon Islanders went to Queensland, Fiji, Samoa and New Caledonia as laborers. For small islands like Sikaiana having a population of something like 180, recruitment of young men to the plantations had a tremendous impact on the islands subsistence activities. Recruiting was stopped by law in 1901 and the return of most of the laborers was enforced between 1903 and 1906.

Political Situation

During the second half of the 19th century an increasing rivalry emerged among the dominant European Colonial Powers like Great Britain, Germany and France. But also the United States became a threat, seeking new colonies and markets for its manufactured goods. Faced with German's annexation of New Guinea and Samoa, and the French annexation of New Caledonia and Vanuatu the British government decided to declare a protectorate over the Solomons. Between 1893 and 1898 The British Solomon Islands Protectorate was proclaimed. Some of the latest islands to be incorporated in the British Protectorate was Rennell and Bellona, which happened in August 1898 (Kuschel, 1988c).

Since the Solomon Islands was a strategic focal point of Pacific operations in the Second World War it had considerable impact on the customary patterns of Melanesian life. In May 1942 the Japanese occupied Tulagi, the capital of the Protectorate. In November 1942 the Americans landed, took back Tulagi and build an airfield on Guadalcanal, where the present Henderson Airfield is now situated. On July 7, 1978 the Solomon Islands became independent and two months later became the 150th member of the United Nations.

In tourist leaflets and on local postcards the Solomon Islands are advertised as 'The Happy Isles'. Lately, however, it has been difficult for the islanders to live up to this romanticized cliché. In May 1999 started a severe ethnic conflict between two large Melanesian groups: the Malaitan and the Guadalcanal people. An old conflict with many political and economic motives surfaced. Much of the tensions are related to the government's favoritism towards development on Malaita and the neglect of developing other areas. The recent outbreak of hostilities began when angry young

Guadalcanal men felt short of available land and accused the Malaitans to be the cause for the scantiness of land—a problem area that goes back to WW II. From the beginning of the 1940's, when the American troops needed manpower to build the Henderson Airfield, Malaitans had come to Guadalcanal. Their settling down created resentment among the locals. Later on, the Malaitans rose to become the island's business and political elite and today the Malaitans hold most of the political and administrative positions in the Solomons. The police force is predominantly Malaitan; the Malaitans are also the clever businessmen and they have a majority of seats in the government. The Guadalcanal people organized themselves in the Guadalcanal Liberation Army (GRA) and have since 1999 forced more than 20.000 Malaitans, including part Malaitan and part Guadalcanal people, off the land in Guadalcanal and coerced them to return to Malaita. The Malaitans, meanwhile, organized themselves in the Malaitan Eagle Force and were ferociously fighting back. With the many killings following in the wake of the ethnic conflict, the capital Honiara was in the year 2000 almost emptied of people. Tourists were no longer visiting the islands, hotels and shops closed down and local politicians played their too well-known power game, bringing the country on the verge of bankruptcy.

Economy

Most of the people in the Solomons still depend on subsistence economy, mainly agriculture and fishing, though in many areas it has become more and more difficult to survive. With the population increase, soil exhaustion ensued. The carrying capacity of the soil is reaching its limit, especially now where hundreds and hundreds have had to flee Honiara and go back to their own islands. Whereas during the colonial area almost only copra was exported, to day one finds a much more diversified export. The main export commodities are timber, fish, palm oil, cocoa and some minerals. Unfortunately, the government has sold fishing- and logging rights to international companies who pay a fairly small amount to the government but take all profit themselves. It looks very much like exploitation of the country's limited resources, authorized by blundering politicians. As the CIA said on their Factbook Home Page 10-08-1999: "In recent years the government has poorly managed the country's finances" (http, 1999). Today, after the prolonged inter-ethnic tension, where international business almost has come to a halt, where international fundings and sponsoring have been held back, the government has difficulties paying its employees—and people talk about bankruptcy not being too far away.

Only few Solomon Islanders are employed. Out of the 34.098 employed in 1996, 72% of the employed worked in the private sector

(agriculture, fishing, forestry and logging, manufacturing, trading, transportation, communication and religious- and community services; Statistical Bulletin No 6/99)). Those employed by the Central Government work within the areas of transport, construction, education, and medical service. The unemployment rate is unknown, since we do not know the potential work force in the Solomon Islands—and besides many people are occupied with local subsistence. When evaluating the employment rates, one has to remember that the data were collected by a postal survey with a very low response rate.

Population

The first census in the Solomon Islands dates from 1931. District Commissioners went to the districts but at certain places it was almost impossible to make a count. Based on the available data the population for that year was estimated to be 94.066 (Annual Report, 1969). The population has steadily increased and was in 1995: 367.800 (Naesol, 1995). The dominating group are the Melanesians (93.3%), a term which has been debated by Carrier and Keesing (Berg, 2000), followed by the Polynesians (4.0%). The Micronesian group (1.4%) mainly consist of people from Kiribati (Gilbert Islands) and Tuvalu (Ellis Island), who were resettled in the Solomon Islands during the late 1950's. The European, Chinese and other ethnic groups account for 1.3% (Bennett, 1987:323; Naesol, 1995:12). It is estimated that 44% are below the age of 15 years, 53% between the age of 15 and 64 years and 3% above 65 years.

Mainly Austronesian languages and some Non-Austronesian languages are spoken. It is said that at "least 87 vernacular languages are spoken on the various islands" (SI Handbook, nd). Pidgin English is used as a Lingua Franca. Approximately 1–2% of the population is said to speak English.

Religions

The Solomon Islands has become a playground for different denominations. 96% say they are Christians. For the elder generation, being a Christian is an important thing in life and being a good and faithful Christian ensures a pleasant after-life. Today, however, many from the younger generation move away from Christianity because its norms and values are regarded as old fashioned and not in accordance with the 'modern world'. Especially younger members of the Seventh Day Adventist revolt against the very strict rules of Sabbath and the norms condemning smoking and drinking.

Health Sector

The Solomon Islanders appeared strong and healthy to those who met them at the beaches in the early contact period. A more lengthy contact and a closer inspection would reveal that many suffered from malaria, yaws, tuberculosis and leprosy. Especially malaria and yaws seem to have ravaged the islands. According to Bennett (1987:9): "The combination of yaws and malaria probably did have an adverse effect on the fertility of the women. Those who gave birth saw 40 percent of their babies die from malaria. The survivors of this and yaws by adulthood developed some resistance to both diseases. Hookworm, spread by pigs, caused anemia, as did malaria. Like malaria and yaws, it was debilitating and, in combination with those other diseases, was sometimes fatal. Some people survived into old age, but the majority could expect to live no more than about thirty years." The local people were very sensitive towards diseases such as influenza and dysentery. Though the diseases seem to have been known in the traditional societies, the different variations of them brought by foreign boats could be fatal. Even at the beginning of the 1970's Kuschel observed how parents tried to keep their children away from vessels stopping on Bellona Island. One of the 'free gifts' Europeans, Australians and members of other socalled 'civilized societies' presented to the local people, was the introduction of new diseases like venereal diseases and consumption, smallpox, measles, mumps and chicken pox.

At the plantations, homosexual relations existed. The planters accepted it among the natives, but "[n]o matter, if priest, planter, or trader was involved, suicide, flight, deportation, or a ban on re-entry to the protectorate put an end to the activities of reputed European male homosexuals in the Solomons before the war. Only one European, F.E. Gilbert, was brought to trial in 1917, on his own insistence, and was sentenced to seven years' imprisonment in Suva" (Bennett, footnote 56, p. 441).

White men had a double standard concerning sex with the natives. Some married native women, and the wives of laborers sometimes became concubines to unmarried planters, who paid them for their services. Although many European males were willing to engage in sexual intercourse with Solomon Island women, no planter would think of publicly shaking hands with an Islander. One district Officer demanded that the people wash their tax money before presenting it to him (Bennett, 1987:184).

Honiara

During WW II the American Army decided to build a large supply depot on a land strip called Nahoniara (lit., "facing the north-east winds")

situated on the large island of Guadalcanal. They constructed wharfs, roads and the Henderson Airfield. After the war, when the US Army departed, the British moved their headquarters from Tulagi, the former capital of the Solomon Islands, to Honiara. Up to the 1960's Honiara was a small town fairly dull and uneventful, build along a dirt road with governmental offices and institutions, High Court and mostly Chinese shops. There were a few hotels and guest houses.

The Malaitan men, whom the US army had brought in to help in the construction work, remained after the army had left. They simply squatted, bought land from men with questionable authority, or just used force to obtain land on which to build. According to Tarcisius T. Kabutaulaka (2000): "In the past decades many Guadalcanal people (predominantly males) sold customary land around Honiara to people from other provinces. This is in spite of Guadalcanal's matrilineal society where females are the custodians of land. Furthermore, many individuals were selling land without consulting other members of their laen (tribe). This often caused conflicts within landowning groups and between them and the new owners. The sale of land has, over the years, been resented by women and a younger generation of Guadalcanal people who view the act as a sale of their 'birth right'."

In the 1970's people from other islands, including Polynesian Outliers, were attracted by the town and settled in an area known as White River, west of the town. At the beginning some worked as house boys for British and Australian expatriates, some worked at the plantations and some got jobs in the construction business. In the beginning there were jobs which now are very difficult to get at—even for a person having a high-school degree. The town life acts as a magnet for young people on the many islands. Rural youth are attracted by what they think is an easy life and by the idea of the 1.000 different things one can do—as opposed to the few things at home. It is an escape from sheer boredom experienced on their islands, that make them go to Honiara, where they stay with *wantoks*. They roam the streets always in the search for jobs, food, alcohol or entertainment. They are called *masta liu*. *Masta liu*, which can be translated as Mister vagrant, is a combination of the English term 'master' and the North-Malaitan term *liu* (lit., drifting). In general it has a derogatory meaning for those roaming aimlessly around. Most of the *Masta liu* come from Malaita and live in squatter settlements around Honiara. Squatter settlements are areas technically owned by the government and leased out on a Temporary Occupation Lease (TOL) to people who wish to build any house of any description.

Honiara houses also many young children who are taken away from their islands to receive schooling in Honiara. Their parents have realized the importance of a higher education—though it is most difficult for most

families to pay the high school fees which in 1998 was SI$ 1.295, as compared to SI$ 470 in 1992 (Statistical Bulletin No 17/98:Table 7). Principally, governmental schools are free, but the students still have to pay 'contributions' to the schools, an amount determined by the school board. According to Berg (in preparation) the school fees vary from 10 SI$ per year in the Marovo lagoon to several thousand dollars in some schools in Honiara. With school fees or 'contributions' to be paid, the Solomon Island Government, Missions and Churches contribute to the great disparity between the rich and the poor, the educated and the uneducated—and thus create the basic for a rebellion.

In the period from 1962 to 1996 the population in Honiara has tenfolded. Even though this statistic should be taken with a grain of salt, the rise is nevertheless impressive.

THE PRESENT STUDY

The present article is based on the senior author's field work on Bellona and Rennell during several decades as well on the junior authors interviews with young people in Honiara between 1997–1999. 'Angikinui F. T. Takiika was the founder of The Federation Of Solomon Islands Youth (FOSIY) with its 'Honiara Youth Outreach Program'. FOSIY is a Non-Governmental Organization whose aim is to pick up the poor and uneducated youths who live under very poor conditions, who are marginalized and whose presence is characterized by serious drug- and alcohol misuse, coupled with crime, prostitution and drug peddling. FOSIY's goal is to (1) give young people an opportunity to participate meaningfully and productively in society, (2) enhance a mental and spiritual life for the young people, (3) give the young people a sense of self-esteem, and (4) establish a link among the young Solomon Islanders.

Unfortunately, the project had to be abandoned when the ethnic conflicts escalated. In 2000 Takiika had to flee the Solomon Islands at gunpoint. At that time the Federation had contact with 3.372 young unemployed and out-of-school people from 10 squatter settlements around Honiara. Each of them had been interviewed and the information recorded. Unfortunately, it has not been possible to retrieve the records out of the country for detailed analyses.

It was our plan to let young Solomon Islanders, belonging to the Melanesian-, Polynesian- and Micronesian groups, answer the questionnaire developed by the Pacific Islands' Epidemiological and Psychosocial Research and Training Consortium by Marsella, Kronabel, and Grant. Likewise qualitative in-depth interviews with different ethnic groups as well as

with significant key persons in the society were planned. Nothing of this, unfortunately, materialized since Honiara, immediately after the political upheaval, was emptied of potential informants.

Much of the information about the activities and work in night clubs, casinos, black market etc. is from people who have worked there. Some of them became 'members' of FOSIY, others just talked about their experiences after they stopped working in those premises.

Types of Alcoholic Beverages Available

"For reasons that are probably social or cultural, we often do not classify alcohol as a drug," says Kelley (1995:524). He draws our attention to the fact that "alcohol is indeed a psychoactive drug with many of the characteristics of other drugs of abuse; it causes effects on the brain and behavior, and it has considerable potential for addiction and adverse consequences." In the present paper the term 'psychoactive drug' will be used synonymously with the more common phrase "alcohol and drug".

In and around Honiara several pharmacologically active substances are available, like caffeine, nicotine, methylated spirit, alcoholic beverages, betel nuts, marijuana, hard drugs and mushrooms. Caffeinated products like coffee, tea, and cola are not regarded as containing pharmacologically active substances and are consumed whenever available. Local beer and marijuana are the most frequently consumed substances. They are easily accessible and can be obtained at a relatively low cost.

When it comes to the consumption of alcohol and drugs among the Honiara people no reliable statistical data are available. From the study conducted by the Federation of Solomon Islands Youth (FOSIY) between September 1998 and June 1999 it appeared that 86% of the interviewed 3.372 young unemployed people consumed alcohol.

Access to Alcoholic Beverages

Alcohol can be purchased either at wholesalers, retailers, hotels, some motels, public bars, nightclubs, casinos, and black market outlets. Some nightclubs have opening hours from about 9 or 10 p.m to 2 a.m, others serve alcohol from 10 a.m to 10 p.m. on weekdays but close at weekends at 2 a.m. Casinos have a private section for VIPs only (governmental people, business executives, and introduced tourists). One needs a special membership card for being admitted in to these premises. Here free alcoholic drinks are served as well as soft drinks and coffee.

Besides those places who have a governmental license to sell alcohol, there are illegal black markets where one can buy beer. The black market

outlets are found in nearly all squatter settlements and residential housing areas. Often there are more than just one outlet in each area. There are black market outlets right in the center of the town. These black market outlets are open 24 hours a day, 7 days a week. The stationary black markets have a fairly small selection of alcohol whereas the mobile ones (cars) have a larger choice of beverages. Several of these black markets are run by Malaitan men. Formally, neither wholesalers nor the brewery sell directly to the owners of the black-markets, they usually have to buy at retail shops and at retailer prices. But a few people, with good social networks, are able to buy directly from the brewery and thus are able to sell local beer at a good profit.

Selling alcohol illegally makes them at the same time very vulnerable to police raids. There are several examples of police raids launched against the black market, but apparently none of the owners have been taken to court. Rumors has it, that the police only raid these places to get free alcohol for themselves and not in order to prosecute the offender. Some black markets have never been raided.

Beer. The most popular and also most frequently consumed alcoholic beverage is the locally brewed beer of which there are two kinds: the Solbrew and the Special Brew (SB). Both brands are manufactured by the Solomon Islands Brewery, owned as a joint venture by the Solomon Islands Government, the Nauru Government and the German EKU Brewers. All brewing ingredients are brought in from Australia and Germany and only the water comes from Honiara. Imported beer comes from Australia (Fosters Lager, Victoria bitter, Ice) and New Zealand (Stein Lager) and are brought into the country by the hotels and wholesalers.

The locally produced Solbrew has a fairly small alcohol percentage and has a soft taste, whereas the Special Brew (SB) is much stronger in both percentage and taste. The imported beers are categorized in between. Special Brew is the most popular, due to its higher alcohol content and price.

Home Brew. People with very low income and unemployed people, out-of-school boys, primary-, secondary- and high school students engage in producing and drinking the home brew. It is said to be well-developed in and around Honiara, in Malaita and the islands of Rennell and Bellona. The Western Solomons have until recently been spared this dangerous development. Home brew is fabricated in the traditional way. Yeast, water, sugar and pineapple (or any fruit juice) are mixed and fermented for four to seven days. Those who can afford it, will add juice of any available fruit to reduce the foul taste. On Rennell and Bellona coconut water is used instead of plain water and the fermenting process is one day only.

The reason coconut water hardly ever is used outside Rennell and Bellona is that coconuts are expensive in these places. Home brew is said to be stronger than Special Brew. Home brew—except for *Kwaso* which is sold in plastic bottles—is usually not for sale. One has to be very cautious with the amount of home brew one imbibes, since the fermentation is said to continue inside the body. No diseases have been recorded yet, but some people—as recorded on Bellona Island—have been seen to react like a beast on a rampage, a young man ripped up his cl. brother's belly and others stabbed drinking buddies in the face and neck etc. Self-mutilation seems to be a conspicuous trait when intoxicated by the home brew. While intoxicated by home brew one Bellonese cut his chest several times with a sharp carving knife, stabbed his own thigh, cut off his left index finger, threw a machete in the air and kicked it with his foot, stabbed his own brother's hand with a carving knife, and finally poured kerosene around his thatched-roof house, and placed himself inside before he ignited it.

Toddy. Toddy, known as *kaleve* among the Ontong Java and Sikaiana people, has been known and produced among these ethnic groups for some time. According to Donner (1994) the Sikaiana people learned to ferment coconut toddy from Kiribati refugees coming to the island in the 1860's. The sap from the incised spathes of coconut trees is collected. The sap is kept in a closed container, often a bottle, inside the house. After a few days, the alcohol content is quite high. When served it is attenuated with water and served as a social drink. Lately, however, it has been observed that toddy is fermented for only one day before drinking and consumed for its intoxicating effect. This has been witnessed in one squatter settlement, at the east Mataniko River settlement, which is occupied by people from Ontong Java. The toddy has a sour taste, like the water of very young coconuts, and endows the misuser with a terrible hang-over.

Kwaso. Kwaso is a name said to come from central Malaita, Kwara'ae. Its semantic etymology is unknown. The production of *kwaso* was developed by the Malaitans in Honiara. It was unknown on Malaita itself but has now been introduced on Malaita island. *Kwaso* is mainly made in squatter settlements situated at the back of the mountain ridges that curve around the township. In the squatter settlements and residential housing estates at the coast and within the township enclosure like Ranandi, Naha, Vura, West Kola Ridge, Kukum and the Baha'i Center *kwaso is also produced*. Young people from these areas depend on the use of *kwaso* on a daily basis and also sell it to others.

The *kwaso* has a very high alcohol percentage. It is distilled from the traditional home brew. The pipes from the back of a refrigerator are used

for distillation. The *kwaso* comes in three stages: (1) The first stage is clear and colorless, (2) the second stage is of a lighter brownish color, and (3) the third stage is more brownish or murky. The *kwaso* of all three stages are said to taste equally good and have the same alcohol content, but this has to be tested chemically. No diseases have yet been reported, but when people get drunk they totally loose self-control. Not too long ago, a young man in Green Valley Settlement, a suburb of Honiara, shot himself in front of his mother. In the northern part of Malaita, it is told in Honiara, heavy *kwaso* drinking has also resulted in murder.

Hard liquor. Hard liquor like brandy, whiskey, gin, vodka, sake or tequila, are known among the Solomon Islanders, but scarcely consumed. It is too expensive and no drinking tradition has yet developed around these liquors. The Solomon Islanders were introduced to hard liquor at parties of expatriates, on tourist yachts, and on foreign fishing boats, especially those from Taiwan, and in the clubs. It is not uncommon that the Solomon Islanders, when leaving a party are given the half-emptied bottles to take along the road. When someone acquires hard liquor—or *hotstaf* as it is called in pidgin English—in a club it is distributed in small quantities to others. Not infrequently, the Solomon Islanders, drink hard liquor with beer, and thus get drunk faster than by drinking beer only.

Methylated Spirit. The practice of preparing and drinking methylated spirit seems to be fairly widespread in the South Pacific (Marshall, 1988). In the Solomon Islands it is limited to the Reef Islanders and the Langalanga people. Other Solomon Islanders, when socializing with these two groups, may try it. But usually, they are very cautious because it is known that it may lead to death or blindness. The Langalanga people and Reef Islanders are aware of this danger, but continue practicing the consumption of methylated spirit in order to live up to the picture about themselves as being very tough drinkers.

Concentrated methylated spirit, used to prime pressure lamps, is bought in warehouses or in retail shops. The liquid is poured into a tin container and ignited and then slowly water is added to the burning methylated spirit. When the flames extinguish the remaining liquid is ready to be mixed with sugar or any kind of juice or soft drink. The mixing with the sweet-tasting beverages only serves to reduce the bad taste of the methylated spirit. It is believed that the methylated spirit, when no longer burning, is safe to drink.

Besides the danger of loosing ones eyesight, the drink generates aggressiveness and if not taken slowly, the intoxicated person gets hallucinated. People tanked with methylated spirit have been seen walking

around naked, fighting with knives, and threatening almost everybody around. According to Marshall (1988) deaths attributed to methanol consumption have been reported in the Solomon Islands as early as 1949.

Other Types of Psychoactive Substances Available

At the end of the last millennium several pharmacologically active substances were available and in use. Besides the alcoholic beverages, also betel, tobacco, marijuana, magic mushroom, Angel's Trumpet, cocaine, speed and crack were on the market. The latest addition to this already impressive wide range of products are the consumption of prescription and non-prescription drugs like anti-malaria pills and different kinds of tranquilizers and panadol.

When FOSIY conducted the interviews with 3.372 young unemployed people it was revealed that 79% smoked marijuana, 32% had experienced taking magic mushroom and 11% had experiences with speed and/or cocaine. As the FOSIY report concludes, "11% that have taken either speed or cocaine, or both, showed no signs of behavioral dependence to either speed or cocaine. There is a fear, however, that with the Honiara sense of immoral excitement surrounding the culture of youth, drug and alcohol misuse and with their tendency to take drug and alcohol competitively means that the growth of a hard drug culture in the country . . . will become dangerously deadly for the young people. Already there are deaths . . . that are linked with the misuse of cannabis, magic mushroom, and alcohol—mostly all taken together, and in specific cases a mixture of alcohol and Angel's Trumpet" (FOSIY, n.d.).

Betel. The chewing of betel nuts is widespread and traditional among the Melanesian and Polynesian people. The areca nut is chewed together with crushed limestone (after heating) and leaves from the pepper plant *(Piperaceae)*. "The nutrients of the seeds (mainly fats and carbohydrates)," says Christiansen (1975:191), "are hardly as important as the content of a stimulating alkaloid." The red juice, which is the result of chewing the betel together with the lime and pepper leaves, is mildly narcotic and addictive. Betel nut chewers have very brownish to black teeth. Some people blacken their teeth deliberately with a charcoal rock in order to keep the teeth strong so they can chew betel nuts at old age. People chew betel at all ages and sometimes masticated betel nut concoctions are given to toddlers of 2–3 years of age to chew. For more detailed information about betel chewing in Oceania and the absence of social and economic consequences of betel chewing, see Marshall (1993).

In some parts of the Solomon Islands, like Malaita, Guadalcanal, Russell Islands, betel has been a traditional drug whereas in other parts, like the Western- and Tumotu Province it was rare. Betel nuts are sold in stalls all around the town and in Kukum and Rove markets. Chewing betel nut is seen as the most normal and culturally acceptable drug habit throughout the Solomon Islands. Betel nuts are chewed almost everywhere, as in offices, buses, taxis, banks, parliament—one of the few exceptions being the churches. There is no law that forbids betel chewing. There are only outlet regulations. Some evangelical Christian denominations are totally against the chewing of betel nut and the Health Ministry conducts an anti-betel nut campaign. The Honiara Municipal authority runs a campaign against the chewing of betel in order to keep the city clean.

Tobacco. Tobacco was introduced to the Solomon Islands in the pre-Protectorate contact era. It was introduced by whalers and traders in the 19th century (Bennett, 1987:22; 84). "Initially", says Bennett (p. 93), "acceptance [of tobacco] was fairly slow, but Islanders taught their fellows how to smoke and by the early 1870's the knowledge had followed both ships' and traditional trade routes. From this time until the turn of the century and often beyond, tobacco increasingly became the small change of the Solomons." After getting addicted to tobacco, the demand for more and more intensified. Returning laborers, who had worked in Fiji and Queensland, had learned how to grow and manufacture tobacco. Since the tobacco companies did not permit any tobacco seeds to leave the country, laborers boxes were thoroughly checked before leaving the country. On Bellona a story circulates of how seeds were smuggled out from Queensland by a Solomon Islander: "Some time ago sea-travelers from the Solomon Islands went to Australia. When ready to return to the Solomon Islands, people wanted to bring some tobacco seeds back home but the white man did not permit it. A man from Malaita pulled back the foreskin of his penis and there [he] placed some tobacco seeds and returned to the Solomons. When he arrived in Malaita and pulled back the foreskin of his penis, the tobacco seeds were recovered and planted" (Kuschel, forthcoming).

Today imported cigarettes and locally grown tobacco is available in almost any shop in Honiara. The most popular and cheapest tobacco is the stick tobacco. It comes in sticks of approximately 15 cm, is coarsely cut and rolled in any kind of paper available. Children as young as 7 or 8 years old, who are out of school and who do not live with their parents or guardians, have been found smoking tobacco. Smoking is a social act. Sometimes the owner of a cigarette takes a few puffs and then passes it on to others. At other times tobacco, paper or cigarettes are handed to friends or *wantoks*. This seems to be a widespread behavior in the South Pacific (Marshall,

1991). The Catholic, Anglican and Methodist churches regard tobacco as an accepted stimulant, whereas the Seventh Day Adventist and others regard smoking tobacco as an evil act. Any SDA member, who is caught smoking, gets a warning of being expelled from the church if continuing. Some churches and missions try to discourage their members to smoke, but is has little effect on the younger generation, especially when they leave their islands and go to the capital.

As found in many other parts of the Pacific (Marshall, 1993) tobacco companies carry out a fairly aggressive advertising campaign. Every shop has large posters, advertising a certain brand of cigarette. From 1993 to 1997 the import of tobacco has soared from SI$ 480.000 to SI$ 3.023.000 per anno, i.e. a rise of 630% within 5 years (Statistical Bulletin No 1/98, 2/99, 3/99, 5/99).

Marijuana. Marijuana was introduced to the Solomon Islands in the 1980's. Initially it was brought in to the country by foreigners and a small amount was grown in the aboratum by an Australian forest adviser. In the mid-1990's the use of marijuana exploded. At that time a turtle hunter found a fairly large amount of marijuana hidden in tin boxes on a beach on one of the Three-Sister Islands (probably a pick-up place). The police, it is said, confiscated the boxes and distributed the seeds among members of the force. A named police officer gave his share to a young man from the Shortlands who planted the seeds. At first, part of the harvest was freely distributed in nightclubs and bars and later on the rest was sold. The Shortlander made a lot of money, build a huge house and even build a recording studio. In 1975 a plane filled with marijuana belonging to a well-known Australian marijuana trafficker, was confiscated in Honiara. These and other stories have been told again and again, so by now it is quite difficult to unravel what really happened.

The largest part of marijuana that is smoked in and around Honiara is grown in the Solomon Islands. Only a small portion comes from Papua New Guinea, Fiji or Australia. Around Honiara marijuana is farmed in different areas. Outside Honiara an old woman, a good Christian, grew cannabis, did not know what it was, but knew she could make money out of it. But the marijuana consumption in Honiara is so extensive that the production from these areas is not enough to meet the demands. Therefore, marijuana grown on larger areas in the western and southern part of Guadalcanal, Malaita and Choiseul are brought into the capital. The marijuana from Malaita and Guadalcanal does not have the same high standard as the one coming from Choiseul. The larger fields of marijuana are never raided by the police, because, it is said, the police officers and politicians are involved in both the farming and the sales. When, as during

the ethnic tensions around the millennium, the police raided some of the smaller settlements where they grow marijuana, the plants were uprooted and—it is told—given to some young boys to dry and sell on behalf of the police. Marijuana is also grown on many smaller islands—though not always with success. When it was introduced on the tiny 17km^2 island of Bellona, it created an uproar among the local people, who pulled out the plants and destroyed them.

Marijuana preparations are mostly made from the flowers. During periods of short supply leaves are smoked too, but the resin is not prepared. Nobody knows the potency of the locally grown marijuana, but expert smokers say it is a very potent type.

Marijuana smoking is found among all age groups. Children as young as seven and eight years are found smoking marijuana, as are students at primary and secondary schools and tertiary college. The largest group of the marijuana smokers are the young and middle-aged unemployed people. But also the blue collar workers, the business people and the politicians enjoy reefers. Both men and women, boys and girls are marijuana users. FOSIY's findings also indicate that the young people who smoke marijuana do not just smoke to get an euphoric "high" but smoke to get "stoned", an attitude that appears in a kind of competitive smoking behavior, i.e. who can last longest without keeling over and passing out. It has to be said that the same attitude is found in their alcohol drinking habits and consummation of other substances.

The Solomon Islanders are not concerned—and many do not seem to know—about the severe health problems, chronic lung disease and lung cancer, excessive smoking and especially smoking of marijuana can create. This lack of knowledge is also found elsewhere in the Pacific (Marshall, 1993).

In December 1996 an anti-marijuana law was passed and quite a few people got arrested at the beginning of 1997. No one has been taken to court or fined, however. In 1996 a group of young people sitting in their car outside a nightclub smoking marijuana were arrested. A phone call from a very influential politician, whose nephew was among the arrested, got them out of the police station within very few hours.

Hard Drugs. Hard drugs like cocaine, heroine, crack and speed are fairly new on the drug scene in the Solomons. They were first heard of in the late 1990's. Very little is known about them except that it is believed that cocaine was brought in from Australia, and crack brought into the country by some logging companies and distributed in the night clubs and casinos. Sometimes the male and female prostitutes in some of the casinos are given cocaine and speed, either as part payment or for distribution among customers at orgies.

The cocaine scene, especially in the form of crack, is very exclusive and not very large. The drug is only used among a few business people, especially Asians. But lately, one has been able to buy some crack pills on the streets and there is a real danger, that the use of hard drugs will spread fast. The use of heroine has not been recorded.

Inhalants. The inhalation of volatile substances like paint thinner, gasoline or shoe dye have not been recorded in the Solomon Islands. Adventurous as the Solomon Islanders are and with their complete disregard of danger they probably will fling themselves on these inhalants, if they get introduced to these cheap substances. One can only hope that the Ministry of Youth and the Ministry of Health in the Solomon Islands take their responsibilities seriously and inform and warn about the "severe damage to the central nervous system, liver, kidney and bone marrow" (Desjarlais et al., 1995) inhalation of these substances do have.

Magic Mushroom. In the mid-1980s the Solomon Islanders learned about the hallucinogens contained in a locally grown mushroom (probably *psilocybe* sp). It is a small mushroom, only a few centimeters high, has a whitish gray mantle and some have reddish streaks on the inside lining. The stipe is thin. The mushroom grows in cow paddocks and has been there ever since cattle ranching was introduced before WW II. Its hallucinogenic effect was first learned, when an American peace corps volunteer told about it. Afterwards it became a great hit. Locally it is called the magic mushroom. No special preparation of the mushroom is needed and it is either eaten raw or boiled in water and taken in the form of a decoction. The use of the magic mushroom is concentrated around Honiara and specially used by the Rennellese and Bellonese living in White River and West Mataniko settlements. At the beginning, when people did not know how much to drink of the mushroom extract, several severe incidents happened. But to day the young people know that they only have to drink or chew a little bit to get an effect. More boys than girls drink the mushroom extracts, an exception being some of the Bellonese/Rennellese girls who drink some of it before going to a dance. Depending on the amount of consumption the intoxicated person gets high, feels light but with a definite sense of hollowness of the body and trunk. When hallucinations start, people have experienced skulls with blood dripping from the eyes, teeth, nostrils and ears and people, animals and plants looked dried up, shrivelled, and dead. The hallucination then moves on to a totally distorted view of reality with colors embracing each other, angels dancing, and people flying about. As an aftermath, exhaustion and depression make their entry. According to Berg (in preparation) the intoxicated shows a remarkable lowered sensitivity to bodily pain and can become quite violent.

Whether or not the magic mushroom cause "great discomfort and even heart failure if mixed with alcohol" as found by Lehane (1977:127) is not known.

Angel's Trumpet. Also introduced in the mid-1980s was the six-foot high shrub Angel's Trumpet (*datura* sp). It is a powerful hallucinogenic plant and was introduced from Bougainville. The young leaves, preferably the buds, are cut into pieces and boiled in hot water. The datura plant is taken in the form of decoction and sipped like a normal hot drink. It does not have a pleasant taste—in fact it is quite bitter. Physically it creates a feeling of grogginess and the head feels very heavy. Depending on how much is consumed the effect can last for several hours, with lengthy loss of memory. The intake of Angel's Trumpet is by society regarded as evil and sinful. Schenk (1956:30) wrote about the immediate effect of this drink: "If it is mixed in a man's food or drink he is immediately robbed of his senses and rendered foolish. Many are said to keep laughing all the time, to see nothing, and understand nothing." Due to its bitter taste, Angel's Trumpet is taken out of dire necessity, at times when no other drugs or alcohol is available.

Case 1: Consumption of Angel's Trumpet: a scaring experience.

Angel's Trumpet is known as *tanguika* in the Bellonese language. The plant is named after the person, Tanguika of Sa'apai, who introduced the plant to the island as a flower. Later a PNG man, married to a Bellonese, taught the people how to use it as a drug. After I used the *tanguika*, I made one promise 'never to touch it again', because after I had taken it I could not remember any thing and had a tremendous thirst. We made cups of coffee and dropped a couple of leaves into it after suggestions from friends' experiences. It took about 10–15 minutes before I was off. Afterwards, I do not remember any single thing about what was going on around me in the community. I have not the simplest clue about how I walked the few kilometers from where we were drinking. All of a sudden my mind recovered 100%—but it lasted only a couple of seconds—and then I went off again. Later, someone told me that I was walking around, pretending to be fishing, playing soccer etc. It was a scaring experience.

Solomon Islanders are poly-drug users. Consumers of alcohol also smoke cigarettes, stick-tobacco or marijuana. "Some adventurous also mix betel nuts with alcohol to obtain a greater effect, a practice which is considered dangerous since it has led to several known deaths in the past"

(Berg, 2000:8). Some drink the mushroom extracts with beer, others methylated spirit with caffeinated soft drinks. As when Angel's Trumpet is not intoxicating enough, some Solomon Islanders consume it together with alcohol. There have been quite a few deaths related to mushroom intake. A group of six young men had a drinking party where they consumed magic mushroom, Angel's Trumpet and alcohol. Certainly, a hefty mixture! Five of them died while the last one became permanently insane. According to Berg (in preparation), the survivor is ravingly mad, uses obscene language and exposes himself in public. At night clubs it is not unusual to see people eat magic mushrooms, smoke marijuana and drink beer at the same time. The mushrooms create hallucinations and sometimes paranoic tendencies. To reduce the paranoic effect marijuana is smoked and to reduce any kind of uneasiness beer is consumed in great quantities.

Prescribed Drugs and 'Neck-Squeezing. Lately, pharmaceutical pills like anti-malaria pills and various kinds of tranquilizers, including chloroquine, are mixed and swallowed. People get a prescription easily from a wantok doctor and pass it on to another wantok.

After the political upheaval in Honiara in 1999, many people had to go back to their own islands. On one of the small Polynesian Outliers, Bellona, where it is most difficult for returned school children to get access to any psychoactive substances, they have invented a new method for getting 'high'. These 8–14 years old youngsters squeeze their carotid artery with the fingers for approximately 30–40 seconds, preventing the blood to reach the brain. This 'neck-squeezing' (*soka u'a* in the local language) gives them a pleasant feeling of being high comparable to sniffing glue.

Patterns of Consumption

Drinking Groups. In the Solomon Islands social drinking is emphasized and solitary drinking discouraged. Among the Polynesians a person is hardly ever alone. It is regarded abnormal to be or want to be alone—and this goes for most activities during day- and nighttime. Their group-orientation—as opposed to the Euro-American individualistic orientation, to use Hofstede's distinction—promotes social interaction. This combination of socializing and drinking is a characteristic that has been observed in other Pacific areas too. Marshall (1987:78) refers to a study conducted by Graves et al., who "observed that while Europeans in public bars in New Zealand either drank alone or with only one other person, Pacific Islanders typically drank in groups of three or four and Maoris in groups of five or more." There are always exception to this general rule of social drinking, like public figures who drink secretly in their offices or a few

egocentric, asocial people for whom accumulation rather than distribution and sharing is a value.

Youngsters, who have no parents or guardians to live with, are seen drinking at the age of eight to nine years. They live in squatter areas and drink home brew and smoke marijuana. As they grow older, they hang around with others coming from the same social strata. Those youngsters, who stay with parents, family members or live at boarding- or mission schools, start their drinking spree at a later age. They are usually about 10 to 12 years before they drink and smoke. Their drinking and smoking is much less than the youngsters who live on the mercy of others. Those who attend schools usually engage in drinking during weekends, where they will prepare home brew outside the schools. Drinking and smoking is not allowed inside the school compound, so they go to the beaches or find some drinking spots in the bushes around the capital. Sometimes one can see school boys and girls drinking on the back seats of public busses, cruising around town. Sometimes they have to give sexual favors to the bus driver as a repayment for the free rides on the bus.

For some people, the social norms for behavior in public drinking places like hotels, bars, and clubs are too constricted. The social norms in these places almost choke them. They want a place where they can brag and boast in loud voices. Therefore different groups have their favorite drinking places in bush- or beach areas around the township, called *moskito ba* in Solomon pidgin. Some of these areas are called with specific names by people who frequent them. Such places are 'Promise Point', 'Ranandi Beach', and 'Eden Bay'. Alcohol and drug consumption in these places gives the participants a feeling of freedom. Drinking and socializing in such places carries with it an image of excitement based on the knowing of carrying out an activity that in general is not acceptable, or could not be done in public. This is not a teenage prank but the drinking style among mature men There are many reasons for going to these spots: (1) It is a reminiscence from the colonial time, when colored people were not allowed to drink in bars like the Mendana Club, now called G-club, (2) there is a sense of 'going out', without having to cope with clothing restrictions and high prizes in hotels and bars, (3) here women can drink without restraint, and (4) it is a place where 'long line' can be practiced. 'Long-line' refers to a group of men taking turns with one or two women.

Marshall (1987) has observed, that in the Pacific drinking is mainly for young people. They go on until in their thirties, then cease drinking. On Truk Island Marshall (1979) observed that many of the heavy teenage boozers later on became "pillars of the community". Whether or not this will be the case in the Solomon Islands, will first be known in a few years time. Excessive drinking, smoking and drug consumption is a fairly new trend which started in the 1980's. Those who were in it from the very

beginning are just about to arrive at what Marshall found to be the years of discretion.

Inter-Ethnic Drinking. Though there are great individual differences as how a person reacts to alcohol intake, drinking behavior in general is culturally structured. According to Hundsbæk (2000) people in Denmark speak louder and more lengthy and like to start flirting as alcohol consumption increases. Opposite among some groups in Peru, where people sit in a circle drinking without saying a word. Also in the Solomon Islands, where there are many ethnic groups, do we find different drinking patterns. Some, like people from the Reef Islands, Langalanga, Sikaiana and Malaita have a reputation of being very heavy drinkers. Some groups like to discuss and argue while drinking, others like to joke, sing and dance, and others are regarded as being unable to relax while drinking. This, of course, is a very broad generalization, since there are differences among members of the same ethnic or cultural groups. But the Solomon Islanders themselves categorize and describe the drinking pattern of the various ethnic groups in these generalized terms.

The different ethnic groups generally prefer to drink by themselves. Not only is it easier to be together with people whose language is familiar, discussions easier to follow, but also because drunken behavior is culture specific. A drunk person's behavior will be accepted by members of the same ethnic group, but easily misunderstood by members of another ethnic group. A drunken Bellonese for example likes to argue. If he goes to another table with *wantoks* and starts agitating, people from his own culture will not go into an argument with him, whereas people from Malaita will regard it as a challenge. When under the influence of alcohol and drugs Bellonese' like to sing and dance in the traditional way and they tell stories and jokes, shout and argue. Sometimes they get into a brawl but are stopped by the other Bellonese. There are, however, many variations in drinking patterns within each of the three main 'ethnic groups' in the Solomon Islanders: the Melanesians, the Polynesians and the Micronesians.

Case 2: Correct way of revenge.

A 40 years old Bellonese was drinking at the G-club and had an argument with another Bellonese, 25 years of age. The argument developed into a brawl where the older man finally hit his younger opponent, who walked outside and cried. Accidently, the distressed man met his 10 years older brother to whom he told what had happened. The elder brother walked determined into the G-club and hit the aggressor. Then left. Nobody intervened, since this was a culturally correct way of revenging ones younger brother.

The Bellonese, of Polynesian origin, are very noisy when getting intoxicated, but certain rules are obeyed. Though they mix age-wise, the younger people always occupy themselves at the outskirts of the center. This is also the case with the women, who avoid to be in the center of the drinking party. Both women and the younger people are chased away if they become too noisy, too drunk or display offensive behavior. Even when drunk the Bellonese show respect for their elders, and if someone acts in an inappropriate way, he or she is immediately corrected or even forced to leave the party.

Other Polynesians, like the Tikopians are said to stick to themselves. They drink at home, but do not show any sense of humor while drinking. Even when under the influence of alcohol, they interact in their well-known formal way. People from Sikaiana and Lord Howe Islands usually drink in their settlements. They are hardly seen in town at night. They prefer to drink *kaleve*, a coconut toddy, and other kinds of homebrew.

Malaitan people, belonging to the Melanesian group, do not sing or dance in public in the traditional way. In clubs they will move their bodies to modern music, but in general they like to talk a lot. Only lately do women participate in public Malaitan drinking parties. Polynesians claim that the Malaitans get into fights more easily than the Polynesians. Respect for elders exist, but does not have the same status as among the Polynesians. Where the Polynesians show respect out of veneration for the elders (Kuschel, Takiika & 'Angiki, 1999) the Malaitan people avoid to debase elders out of fear for retaliation by magic.

The Langalanga people, another Melanesian group, drink methylated spirit and become very aggressive. That's why many ethnic groups are afraid of joining them in their drinking parties.

Among the Micronesians like the Gilbertese, one often finds competitive singing and dancing, as well as the use of a party-clown who is teased and teases others. They show respect towards their elders, and youth drinking is accepted by grown-ups.

If people, who belong to different ethnic groups and who know each other, meet in hotels, bars or clubs they will sit together and enjoy each others company, but when heavy drinking starts, members of each ethnic group prefer to stay with their *wantoks.*

Drunk as a Lord. When asked when it is time for drinking the answer comes immediately: "When we have money." This means the day people get their pay check. Most drinking takes place at weekends from Friday evening to Sunday evening. This weekend pattern of drinking is widespread in the Pacific (Marshall, 1987:78). There are, however, special occasions when people socialize and drink, namely Christmas, New Year,

Day of Independence and after soccer games. People do not drink before or during the games, since they want to watch and enjoy the game, but afterwards they will sit down and drink heavily.

There are many theories out about why people consume alcohol—often mixed with other drugs. There is Horton's classical theory of fear reduction (1943). Horton believed that the basic function of drinking in every society, including non-industrialized societies, is to reduce fear. The fear could be the result of acculturation-stress or heavy concern about subsistence problems. Field (1962) proposed the idea that serious changes in social organization will result in an increased alcohol intake. Others again stress that consumption of alcohol is the result of the socialization process. Societies which place great emphasis on the child's independence and achievements will create the basis for later alcohol consumption and even alcohol misuse. Marshall (1979), in his famous study of drunkenness on Truk Island in Micronesia can not confirm these theories. He rightly points to the fact, that these theories focus on the individual. Other theories work on the basis of the positive reinforcement models, developed within the behavioristic tradition (Kelley, 1955:521).

Other researchers like Sinha (1993:39) have cogently demonstrated that psychological theories, developed in Western countries, hardly ever grasps what is specific in other cultures. "Psychology in the West," he says, "is basically microsocial in orientation and concentrates almost entirely on personal characteristics of individual actors in social processes rather than on socio-structural factors."

Another factor which should not be forgotten when trying to understand why the Solomon Islanders like to get intoxicated, is that they, like many other Pacific societies are more group-oriented (or what Hofstede would call collectivistic) than the Euro-American cultures in which the theories of alcohol and drug use have been developed.

In the Solomons drinking is a social event. One hardly sees a local drinking in solitude. They drink together because they look forward to and enjoy the social interaction, a time spend together with friends. It is a time of happiness and relaxation, an exchange of ideas, a time of exaltation and having fun. Hardly ever is one confronted with problem-drinking, i.e. getting drunk in order to reduce internal tensions due to economic, physical, psychological or social problems. Binge drinking among young men in the Solomons is a social event—and neither should nor can it ever be understood on an individual level. To do so would be a mistake in the level of analysis.

It is tempting to perceive the young peoples binge drinking from Turner's idea of liminality and communitas (Turner, 1974), according to which people in certain periods of their life need to leave the cultural script

that direct their daily activities. A time where social positions no longer play an important role, but where the individuals can interact in a way usually frowned upon or even prohibited. This is not a condition of normlessness, only a temporary informal gathering, where the participants experience what Mac Marshall (1979) has called "an altered state of conscience."

When young, the crux of the matter is to get drunk as a lord. Being capable of finishing 24 beers before falling over is regarded tough. And tough is what they want to be. Berg (in preparation) reports having witnessed a Solomon Islander drink 74 beers within 18 hours. To drink heavily is also to show off. A young man wants to drink to demonstrate he has now become an adult. To talk and drink to the point where afterwards nothing or only a few things can be remembered, is tough. People will talk about it. The data from the Solomon Islands confirm Marshall's (1987) point that "Typically, Pacific Islanders drink to get drunk."

Is this heavy drinking misuse or abuse? "Where does use and abuse begin? Substance abuse occurs in a social context" says Desjarlais (1995:87). After mentioning six critical variables, Desjarlais summarizes his findings by saying, "Substance abuse in other words, implies functional impairment." From this perspective there is no doubt that much of the young Solomon Islanders consummation of alcohol and drugs must be classified as abuse—since much of the drinking has severe socio-economic consequences. The local people, however, do not share this opinion. They do not seem to reflect about the difference between use and abuse of alcohol and drugs. They do not relate smoking marijuana, drinking alcohol, and consummating drugs with physical or mental diseases that can have irreversible medical consequences. This, it may be hypothesized, might have something to do with their ignorance of the function of the human body—an area which really needs to be researched. If the hypotheses is proved right, this needs to be taken into account when preparing campaigns to counter, what in a western sense seems to be abuse.

But of course, not everybody drinks excessively just out of happiness or having a good time with friends. A few people use drugs and alcohol as to calm their nerves when planning to commit suicide. Especially when committing suicide by drinking extract from poisonous plants or when taking a handful of chloroquine, people gulp down alcohol to reduce the painful time of waiting before it is consummated. But again, problem related alcohol and drug intake, is rare. Most of the time drugs will be consumed out of excitement, to proof ones courage, to explore new grounds, new substances.

In western cultures, where depressions are very high as compared to non-western countries, it is not surprising that theories on alcohol and drug use, misuse and abuse, see the phenomena as a kind of individual

problem-solving or compensation for defective ego functions (Treence and Khantzian, her quoted from Kelley, 1995:518), or as a compensation for an "empty self" (Cushman, 1990). These theories, embedded in their own cultural realm, do not recognize that young people drink alcohol and consume drugs out of excitement.

Substance Related Problems

In his article *'Country Profile on Alcohol in Papua New Guinea'* Mac Marshall (1999a) mentions six alcohol related problems encountered in Papua New Guinea: a resurgent of 'tribal fighting', domestic violence, economic problems, negative health consequences, motor vehicle crashes and consumption of non-beverage alcohol (methylated spirit). Mac Marshall emphasizes that "there is often an association between alcohol use and insults, altercations and vehicular accidents" but that alcohol is not the direct cause. Alcohol, for example, does not cause men to beat their wives, but creates tension and heavy arguments when they return home, which may result in severe beatings—"beatings they mete out are often much worse than when they are sober" (Marshall, 1999a). In the Solomon Islands we find the same substance related problems. But in addition there are examples of abominable behavior, robbery and burglary, sexual violation of women, and the development of prostitution and its aftermaths: unwanted pregnancies, venereal diseases and HIV.

Old Enmity. In the Solomons drunk people sometimes get into verbal arguments that end in brawls with drawn knives. Cases of people having been stabbed to death during such fights occurred but usually the bystanders will intervene and stop the fighting before it gets out of control. Under the influence of alcohol a few people sometimes think of retaliating earlier humiliations. As one Solomon Islander said: "Don't challenge any enemy while being sober. Get drunk, get confidence and go!" In Honiara there is an impression that many Rennellese and Bellonese men's fighting has its origin in conflicts about land on their home islands. Informants from these two islands, however, claim that nowadays, in Friday night binges, people will not get so much involved in fighting about land issues as earlier. Whether or not, drunken quarrels and fighting—especially among the Rennellese and Bellonese—could be seen as a continuation of traditional 'feuding behavior' (Kuschel, 1988a,b) has to be researched more thoroughly. Acts of revenge do not always need alcohol in order to be accomplished. Sophisticated, brutal actions of revenge have taken place in soccer and rugby games in Honiara, where adversaries are knocked down—and even killed—by purpose.

Domestic Violence. A recurrent theme in the discussion of alcohol related problems is gender-based violence, especially domestic violence. It includes intimidation, battering, coercion, sexual harassment and rape. Violence has a tremendous impact on women's health. No doubt men under the influence of alcohol seem to have a reduced sensitivity to what is appropriate and inappropriate behavior. It appears that under the influence of alcohol the brain is hastily emptied for words and convincing blows replace rational arguments. In the Solomons there are numerous examples of husbands shouting at their spouses, using invectives that should never be used in public, pouring kerosine over a wife's body and ignite it, locking up a wife in a room, slapping her face or body, beating her up with sticks or fists. Also kitchen knives and machetes are used to 'educate' the women. Children, if not fast enough to get out of their way, will also be made the subject of verbal and physical punishment. A few killings have been reported. One, however, was a wife who killed her husband. Having had enough of her husband's repeated beating while drunk, she stabbed him to death.

When trying to understand domestic violence—irrespective if it happens under the influence of alcohol or not—one has to consider what the society under study actually regards as domestic violence and what falls under the category of spouse squabbles. The contents of these two categories are not necessarily the same in Western and non-Western societies (Kuschel, 1996). But, in unraveling this problem one has to be aware of getting information from people of different age groups and both sexes, since the understanding of what is acceptable behavior and what is unacceptable behavior among spouses, has changed during the last generations as well as women and men not always do have the same opinion about this topic. Men like to call their vehement behavior just a kind of 'education'—even if the back of the spouse, after contact with a machete, looks like a road map of New York City.

Women have a problem in reporting violent abuse by their husbands to the police. First of all, the police often regard wife-beating as domestic cases and refuses to write a report, secondly the police is said to have taken advantages of distressed women trying to file a case towards their violent, drunken husbands. In order to fight violence against women a Family Support Center has been established in Honiara.

It is important to realize that though alcohol and drug consumption often is related to domestic violence, and that the beating under these circumstances are more savage than under non-intoxicated situations, alcohol is not the only reason for domestic violence. As long as there exists an asymmetrical social power relation between the two sexes, domestic violence will flourish in those societies who have embraced violence as a mean of conflict resolution. Alcohol and drugs increase the sufferings, but do not cause them. Interesting in this connection is also the observations

made and reported by Solomon Islanders: Intake of marijuana reduces violence in situations of social conflicts. From a social-psychological point of view and from a feministic point of view—but certainly not from a medical point of view—one should try to let males smoke more marijuana and drink less.

Abominable Behavior. Under the influence of alcohol some men do things they hardly ever would do while sober, such as taking off their clothes and run about naked in public. In one situation at a dance in White River, a man got so horny that he started seducing a girl in the middle of the dance floor. The onlookers felt both amused and embarrassed having to witness such a private act. Their reaction was admirable. Instead of creating a lot of fuss and violence, they let the lovers do what they had to do and just darkened the room by loosening the electrical bulbs.

Socio-Economic Problems. Expenditures on alcoholic beverages during the Friday night binges have disastrous effect on many families. Having been out with the *wantoks*, very little if any of the wages is left. The spending of money on alcohol, marijuana or sometimes prostitutes creates great tension at home. The result is that children can not attend schools. There are examples where bright children had to leave the schools, because the father's wages were spend on alcohol and drugs. In several recorded cases very bright girls decided to continue their education but had to earn money by acting as weekend prostitutes.

Excessive use of money for alcohol also reduces the family's ability to buy sufficient and nutritious food and to keep their homes in a good condition. Sometimes, if the living place is rented, the family has to move into a squatter quarter if they can not pay the rent.

By preventing one's family members or relatives from living a decent life by drinking up one's wages, instead of using them for school fees or expenditures of subsistence, the drunkard performs what Galtung has called 'structural violence'. By this term he understands: "Anything avoidable that impedes human self-realization" (Galtung, 1969). Structural violence is thus any act or behavior "which increases the distance between the potential and the actual, and that which impedes the decrease of this distance" (ibid). If one regards the extensive spending of money on alcohol and drugs as structural violence, one should consider whether or not structural violence should be put on an equal footing with other forms of violence and thus be punishable by society. By becoming an act of violence, the behavior is removed from the sphere of privacy and becomes a public concern. In its consequences the laws have to be rewritten and the instigator of structural violence be punished, just like other acts of violence are punished by society.

But structural violence, which according to Galtung appears in asymmetrical political systems, also has consequences in future intervention. If one really wants to counteract the reduction of families' social lives, one has to do something about the asymmetrical gender and power relation, as it is found in the Solomon Islands. A change in this direction is more than needed.

Motor Vehicle Crashes. There is an increase in driving motor vehicles while under the influence of alcohol and/or marijuana. Quite a few accidents have occurred. The drivers are taken to court and usually receive a fine of SI$ 300 to SI$ 800 or, in severe cases, their driver license is confiscated. No imprisonments have been heard of.

Sexual Violations. Sexual violations under alcohol and drug intake appear both within and outside the family. What usually happens is that a man forces a woman to satisfy his sexual desires without her consent. Within families the spouse is forced to obey her husbands desires, even if she has menstruation. If a drunkard commits sexual violations towards a female to whom he is so related that it is regarded as incest, he usually will excuse himself the day after, saying that he was too drunk to realize who it was. One man used the excuse of darkness to explain why he, under the influence of alcohol, had forced himself upon his niece (MZD).

In the Solomon Islands there is a distinction between two types of sexual violations. Both of these would in western terminology be called rape (i.e. sex without consent), but only one type is regarded as rape in the Solomons. The rape by force is regarded as an offence, when the female, by brutal force and under the threat of being maltreated or killed if she does not obey the perpetrator, has to engage in sexual activities of whatever kind is demanded.

Case 3: Forced sex regarded as rape.

Six intoxicated boys from Kobito, all Malaitans, used a gun to make a girl accept "pulling the train". This girl is from Kwara'ae but lives in the Borderline settlement, which is close to Kobito and one must walk past Kobito to get to Borderline. This girl had got out of the bus at the Kobito/Borderline/Greenvalley junction and walked toward Greenvalley. Two boys confronted her on the road, one holding a gun. The one with the gun quickly said. "If you shout or scream I will shoot you." She fully understood the threat. She was ordered to lay down beside the road and then the six boys took turns in gang-raping her, beginning with the one that had the gun. All through the sexual assault the gun was pointed at her.

The other form of sexual abuse, which is not called rape in the Solomons, is where the female victim due to her dependency on the perpetrator, due to her low social status or occupation (prostitute), is sexually violated. It is the asymmetrical power relation, social and psychological, that is crucial. A woman who lives in a man's household and who is dependent on food and shelter provided by him and who at the same time has a low social status, can not raise an outcry if he—even if it is her uncle—jumps upon her. The female does not feel strong enough to say no so it can be heard and seen, and will feel scared and ashamed to tell others. If, however, it becomes known, the man will be scolded by his close kin, but otherwise nothing will happen. The victimized woman, on the other hand, will be kicked out of the household for 'shaming' the man by telling about it. Her verbal behavior is socially frowned upon.

A woman, who through her profession satisfies customers sexual desires, has no rights whatsoever. If paid, either by money or with food and drinks, she has to do what others want her to do. Even if the customer does not pay, she can make no claims of having been raped. It's bad luck, as the Solomon Islanders say.

Case 4: Forced sex—but no rape.

A Rennellese woman lived in the Matabai settlement (West Mataniko Rivermouth). She went with some Malaitan boys from Kwara'ae, living at the Borderline Settlement, to have a drinking party at Ranadi beach. There were fifteen boys, and when heavily intoxicated, they dug a 'grave' into the sand where they 'buried' her so only her head was exposed. Then the 15 boys took turns having oral sex with her. There was no cash payment and no food payment apart from the *kwaso* the whole group was consuming.

Incidents like this one (case 4) happens under the influence of drugs and alcohol and are not classified or talked about as rape, but just as 'long line'—or gang-rape as it is called in American text books. What is needed is a more refined data collection of what kind of behavior is regarded as sexual violations by the different ethnic groups living in and around Honiara.

Prostitution. Within the last 10 to 15 years prostitution—for a discussion of the term 'prostitution' in the Solomon Islands context see Berg (in preparation)—has increased in the Solomon Islands. Part of it is closely related to the alcohol and drug culture that developed in the same period.

Some of the prostitution is related to the fishing and logging industry, some to tourism and the development of business companies.

Offering of women for material goods is not new in the island group. According to Bennett (1987:441n34, n35; p. 29) Makira supplied whalers with women in the second half of the 18th century. About the soliciting process in Makira Harbor there exists a description from 1852, where the naturalist MacGillivray was witnessing the ongoing activities (here quoted from Bennett, 1987:29): "The women of Makira are of diminutive stature. Some of the young girls are well made and often have pleasing and occasionally even pretty features . . . I do not think that in any part of the world less regard is paid to female chastity—in fact such may be said to have no existence at Makira. Prostitution is carried on in the most shameless manner. Little boys and girls may be seen pimping for their sisters and the female who is said to have enjoyed the greatest amount of patronage from the ship during our stay was not old enough to have attained the outward signs of puberty."

As Bennett rightfully says, it is doubtful whether the young pimps really were close kin like brothers and sisters. Records are also available from the Shortland Islands where chiefs offered women to Europeans in the 1930's. "Up to the World War II, on Santa Ana", says Bennett p. 441, "the 'abode of frail sisterhood', prostitutes *(urao)* were a normal part of most feasts with European visitors . . . "

Earlier on the prostitutes in the Solomon Islands were called *jiuri or djuri* (jewelry?). Today prostitutes are called *dugongs* after the manatee, the sea cow. The term is a fairly recent introduction . The name has probably been introduced by seamen among whom the sea cow was surrounded with mystery. As Carr (1975:96) speculates: "There is a persistent tradition—reflected in its scientific name—that the manatee was the mermaid of the early mariners. If so, then one can only pity those chaps. Manatees are splendid, amiable animals, but they are ugly as sin, and one wonders how their ladylike attribute—a pair of pectorally placed teats—could have so bemused the wistful old sailors as to evoke the mermaid legend." Berg (in preparation) found another explanation for the use of the term *dugon*. Prostitutes originally came from the Polynesian group. With age the women get large and fat and thus their body size resembles the *dugongs.*

There are prostitutes from all the three main ethnic groups. Most prostitutes are Melanesians from Lau, Kwara'ae, Langalanga and 'Are'are. Among the Polynesians, girls from the two Polynesian Outliers Rennell and Bellona are in the majority. A few prostitutes are Micronesians. There are three groups of prostitutes: (1) the professionals, (2) the semi-professionals, and (3) the common prostitutes.

(1) The professionals

There are only a few professional prostitutes in Honiara. The much coveted ones are from Kiribata, Micronesia. They are tall, glistening dark and well kept. But also some Bellonese women belong in this category. In 1999 there were three of them. They all have a good command of the English language, are calm and behave in a more Euro-American way than those in the other groups. They are paid between 1,000–2,000 SI$ per night and find their clients among the business executives in Honiara, who take them to the bars, nightclubs and casinos.

(2) The week-end prostitutes

The week-end prostitutes hang around in certain well-known bars, nightclubs and hotels or have organized themselves in houses in various residential areas around Honiara, among others a house in Kukum called 7C because the street number is written in large letters. Their clientele ranges from blue- and white-collar workers to unemployed people. These prostitutes are called weekend-*dugongs* because their main activities are at weekends, when their potential clientele have got their pay check. They usually get 50–300 SI$ per night. Most of the week-end prostitutes engage in this activity to get free alcohol or to earn money for their families, or for school fees.

(3) Common prostitutes

The common prostitutes look unhealthy and sleazy. They solicit in the streets "down town", on the quays, and in certain hotels and night clubs. There are certain places in town, like at the back of the government's Treasure Department, where both girls and boys are picked up. They get transported out to foreign cargo- or fishing boats, or sailing boats anchoring 500 meter off the beaches. A well-known young man from Lau uses his uncle's outboard motor canoe to transport the girls to the ships that call in plus acts as their security back-up. Between 5 and 7. p.m. he might have shipped three or four boat loads of girls to the cargo vessels. He then waits for the girls to return—around 4 a.m.—collects his fees and drives home. If not on the boats, the common prostitutes perform in the wharf area, on the beaches surrounding the bars and hotels, in the fields, bushes or taxis. The common prostitutes are known for their low bodily hygiene and poor health. They do almost everything to satisfy their customers and are in general badly paid for their services. They can make two to five SI$, or they may get a couple of beers or other alcoholic beverages. Sometimes they have to take potluck such as a few packets of biscuits or

cans of fish. Pick-pocketing of the customer, when drunk, is not unknown among this group of girls. More often than not the women returning from the boats are heavily intoxicated. Nearly all prostitutes, before soliciting, smoke marijuana and drink alcohol.

Sometimes men will entice or persuade women, often relatives of low status, to get involved in prostitution, so they can earn some money to be used on drinking sprees. Many of these young girls have difficulty in saying 'no', since they are depending on their relatives for shelter and protection. Young boys are sometimes used by potential customers to find some girls. The boys, eager to get money or alcohol for their service, will do everything to find or even force a girl to spend some time with a horny man.

Criminality. Drinking is very costly and so is smoking. The unemployed are in a constant search for new sources of income. Robbery and burglary have increased. Another source of income is 'compensation payment'. Relatives of prostitutes will visit the customer shortly after his sexual liaisons and demand compensation for the shame he brought to their family by cohabiting with one of their women. Asking for compensation is essential a Malaitan custom (Berg, 2000:148ff). It is a habit that seems to have spread to other ethnic groups in Honiara too. Again, the alcohol is not the cause of the increase in criminal acts. Rather the criminal acts are means of achieving another goal: money for alcohol.

After the ethnic conflicts started and weapons suddenly appeared on the scene in the Solomons, shooting is heard after intake of alcohol. On February 18, 2000 the Wantok Press released the following news (case 5).

Case 5: Drunken members of the Bougainville Revolutionary Army (BRA)

Drunken members of the Bougainville Revolutionary Army (BRA) have consistently harassed market vendors in the Western Solomons town of Gizo . . . The latest incident in this on-going problem happened Saturday night, when a BRA member threatened to shoot market vendors of mostly I-Kiribati descendants with a high powered gun. Following the threats, the BRA member abused the ethnic I-Kiribati women and men, who were selling coffee, tea, smoke and other food items. The Saturday night incident also brought in other drunkard BRAs who also responded and beat the culprit up, forcing members of the Solomon Islands Police to retreat . . . . In a similar incident, drunkard BRAs also bashed up a Solomon Islands national in front of Gizo police and the 'Western State' Police Commander . . .

(Wantok press 16.02.2001)

Health. Among the locals there is a surprising ignorance of alcohol and drug related health problems like hypertension, cirrhosis, delirium tremens, as well as other physiological and psychological diseases. They believe that blackouts, memory loss and hallucinations are related to and limited to the actual intake and will disappear as soon as one stops consuming them. Most people have no knowledge of—or anyhow do not reflect—on the long-term effects excessive alcohol and drug use will have on the human organism. Interesting is also, that many are ignorant of the position and function of internal organs which might be affected. The heart, lungs, and stomach are known and can be placed on a chart with a drawing of the body of a human being. But when it comes to the liver or kidney most people are ignorant.

The health problems related to prostitution are numerous. Condoms are not used, unless the customers bring them themselves. In Honiara it is difficult to get condoms free, because the Solomon Islands Christian Association (SICA) does not allow it. One can only get free condoms in clinics if one can procure a marriage license. Condoms sold in pharmacies, are said to be old and expensive. Also, there is no tradition for using condoms in the Solomon Islands, and some men believe in the myth that by using them they can not have real sex and that the use of condoms will reduce their potency. The result is that most of the time—what in pidgin English is called 'meat-to-meat-fuck' or 'naked-wire-fuck'—takes place.

There exists some consternation in Honiara about the possible existence of HIV/AIDS within the community. The attitude about HIV/AIDS ranges from one of fear to that of "it only happens to stupid people or to *dugongs* (prostitutes), or to homosexuals". Such attitudes are dangerous for a small community like Honiara where unsafe sexual practices and multiple sex partners are very much the norm.

According to the Ministry of Health there are two cases of HIV on record. The two infected were non-Solomon Islanders and were send back to their homeland. The government is very reluctant to talk about it in order not to destroy the picture of 'The Happy Isles'. But others are alarmed by the fear of HIV spreading in the Solomons, especially with the increasing travel to and from the Solomon Islands. This fear was one of the main reasons behind forming the Federation of Solomon Islands Youth (FOSIY). In May 2000 the Solomon Islands Minister for Youth, Women and Sport, Uilda Kari, brought up the topic of "ways to halt the spread of HIV/AIDS". This was done at the fourth commonwealth youth minister meeting in Honiara (Pacific Islands Report, 2000b). The community in general is unprepared for an outbreak of HIV. It is imperative therefore that an awareness campaign on drug and alcohol misuse is carried out and directly related to the HIV/AIDS issue.

Venereal diseases like gonorrhea, syphilis and chlamydia flourish in the Solomons, especially among the 15–30 years old people. The Solomon Islands government has, according to the authors knowledge, not published any statistics about it. But among the local people it is a well-known fact, that venereal diseases are spreading fast. Berg (in preparation) draws a most depressing picture of the amount of incidences of venereal diseases in the population. He refers to a source from New Zealand who says, that "they rate Solomon Islands as world leader in terms of venereal diseases in relation to population size." With their great mobility and the sexual promiscuity among youngsters in and around Honiara the Solomon Islanders are facing an epidemic outburst of syphilis, gonorrhea and chlamydia.

ADDRESSING THE ABUSE

From many corners of the Pacific words of warning are raised about the steady increase of the use of tobacco, alcohol and drugs and that the coming years will see a significantly greater morbidity and mortality rate than before. Some institutions in the Solomon Islands are realizing this and have set up programs to reduce and prevent the extensive consumption of these health threatening substances, including smoking. Varying programs have been initiated like:

- Governmental youth and health programs.
- Municipal authority programs & regulations (youth and health).
- Church sermons and youth programs (SICA: SI Christian Ass. & SIFGA: SI Full Gospel Ass.).
- Police community policing programs.
- Family Support Center programs run by the Family Support Center, Honiara.
- Federation of Solomon Islands Youth programs (FOSIY).
- *Na makupuna* (lit., grandchildren) programs concerning the social welfare of mainly Rennellese and Bellonese youngsters.
- National Council of Women, targeting women's rights and family abuse policies and programs.

Prevention campaigns from the various organizations have approached the problem of the extensive use of alcohol and drugs either (1) by using a socio-medical awareness raising model, where focus is on physical and psychological damages related to excessive drug consumption or by (2) using atrocity propaganda including fits of moral rectitudes,

where the target population is attacked of being immoral, irresponsible or wanton. Churches raise their voices and remind their congregation of what the Bible says about defiling one's body. This is done in order to create fear and shame. People dissociate themselves from such finger wagging campaigns and the campaigns certainly do not have any profound effect on the consumption pattern.

Approaching the alcohol and drug problems in Honiara has not been very successful. After strict government regulations or after serious public campaigns, the public becomes more conscious of the issues involved and "slow down" somewhat. But the campaigns have no long-term effect. Interestingly enough the professional medical world in the Solomon Islands has kept a fairly low profile in these campaigns, especially in the anti-drug campaigns.

What these campaigns neglect and fail to see is that the consumption of psychoactive substances in the Solomon Islands by its users are related to sociability. It constitutes a frame where an open social interaction can take place, where there is nothing to be ashamed of, and nothing to have moral scruples about. It is, as said earlier, a time of social relaxation. Campaigns concentrating on guilt and shame are just missing their point almost one hundred percent.

Another problem with programs trying to reduce the excessive consumption of alcohol, drugs and tobacco is that they are too short-lived. A few are funded by foreign aid programs like WHO and are not comprehensive enough in terms of length of time and economic power to make a lasting effect. Some other dangers with foreign aid programs is their implicit assumption that campaigns that work in Europe or America also work in the Solomons.

Last but not least the campaigns that address alcohol- and drug consumption and its concomitant phenomena, do not pay any attention to such important factors as unemployment, poverty, marginalization, absence of alternatives, and resignation towards political corruption and nepotism. What alternatives do poor, uneducated and unemployed people have in a world where the prerequisites for a decent life are as far away from them as the moon?

Intervention Programs

Intervention should take place on (1) a political level, (2) a socio-economic level, and (3) a social-psychological level. It is a political problem because, as already pointed out by Desjarlais et al. (1995:92) "governments are aware of the negative effects of alcohol abuse on national development, but because of the economic benefits to governments through taxes

and to merchants through profits, legal and illegal, little is done to reduce the availability and consumption of alcohol and its contribution to social problems, such as automobile accidents, family dislocations, violence, and malnutrition." So part of an attempt to encapsulate the actual problem is to get the government to rethink their alcohol, tobacco and drug policy. Especially, because the government has to realize that what is gained in taxation at present has to be repaid 100 folds in the future when the results of the present use, misuse and abuse can be seen in an increase of morbidity and mortality related to the intake of psychoactive substances, especially tobacco. Furthermore, as cogently pointed out by Marshall (1993), Pacific Islands governments need to "control the aggressive marketing of alcohol and tobacco by multinationals" if they want to build "healthy, modern societies."

On the socio-economic level alternatives to the present life situation should be developed. People in general do not like to live at the edge of society, they want to be part of it instead of living in a social vacuum. Therefore, the tremendous problem of unemployment should be addressed by both the governmental and private sector. International companies should be invited to develop the country, not to exploit it, work places be created and the working people thus become models for the younger generation. As by now, life in Honiara does not "exactly offer many possibilities for the migrants. The rate of unemployment is very high, schooling is extremely expensive, it is difficult to find jobs even for those who are educated. Corruption is high and it is more a question of whom you know rather than what you know when it comes to competing for jobs. As a result there are many talented young people who desperately want to make use of their skills, but are unable to" (Na Makupuna, n.d.). City-dwellers and migrants coming to the capital should again have visions about the future and challenges to face.

Intervention on the social-psychological level deal with the individual and its social interaction. As pointed out earlier, the intake of alcohol and drugs is basically a social phenomenon, not an individual one. There is a social drinking pattern with its social norms. To change the attitudes of the individual demands a change of the attitudes in the group. Earlier studies, among others those by Collins and Marlatt (1981:236), have demonstrated "that the rate and the amount of alcohol consumed by an individual can be influenced by the drinking behaviors of a partner." Especially peer-influence has importance for interventions. With the Solomon Islanders *wantok* system, it is the peer group one should focus upon when dealing with the development of preventive programs. Classical western therapeutic or counselling approaches focusing only on the individual can not be used.

What exactly should be done to curb the problems in the Solomons? Difficult to say as long as we only have very few quantitative data about the use and misuse of psychoactive substances. Without profound knowledge of the extent of the problems no goal-oriented intervention programs can be developed. In order to establish programs that will reduce "the haze in the air and the glazed looks on the faces of island citizens" to use a metaphor from Marshall (1993), quantitative and qualitative data are needed about the consumption pattern: Who consumes what with whom, when, where, why, and with what consequences and who does not consume, why not and with what consequences? It is of utmost importance to unravel the total consumption pattern with all its economic, political, medical, social and psychological ramifications. Any kind of drug use, misuse or abuse should always be sought in the context of its consumption. Without it no long-lasting intervention strategies can be developed.

Therefore, the first thing to do is to establish a research team that should uncover the actual situation and problems. The team should consist of international and local researchers. It should include members of those organizations working with the problem areas such as the Federation Of Solomon Islands Youth (FOSIY) and The Family Support Center as well as significant organizations as the Ministry of Youth and Health, and the Police. It is only by incorporating their immense knowledge, ask cultural relevant questions and methods that reliable data can be collected (for a discussion of the emic-etic problems in research see Kim & Berry, 1993).

The research should use triangulation both in the form of: (1) Investigator triangulation, (2) interdisciplinary triangulation, (3) methodological triangulation, and (4) theory triangulation. For triangulation techniques see Denzin (1978) and Health Education Quarterly, (1992 vol. 19). The research should be a combination of what Kurt Lewin called diagnostic- and participant action research. The researchers study the actual problems from a broad perspective and together with the people under study come up with some suggestions for its solution. But the most important thing is to get to the bottom of the problem areas as seen from both the target group, the users, and the society and to illuminate the differing viewpoints there might exist.

With the scope of the problems identified, it is mandatory to explicate the optional goals of the whole project and to communicate this as clear as possible to all the involved parties. Without a clear objective, free from obscurity and ambiguity, one can never steer free from Scylla and Charybdis. If later on an evaluation is planned a clear goal description is compulsory.

With the objectives of the intervention programs set, the available resources should be mapped out. Resources refer both to economy,

manpower, time, education, and the ephemeral 'personal engagement'. In praxis significant people in the Solomon Island society like medical doctors, nurses, police officers, politicians, church leaders, school teachers, and significant trend setters should be educated (and not just informed) about the actual situation, the severity of the problems, and the demand or hope of their unrelenting support of the program. Since social modeling plays an important part in the drinking pattern, significant people in the drinking groups, family groups and other groups involved in the alcohol- and drug scenery should be involved, thus placing the social aspects in the center of the approaches.

From the very beginning it should be thought of as a high-profile program, i.e., involve important institutions and individuals as the one mentioned above and these institutions should cooperate, not obstruct each others efforts. To be a high-profile program does not mean that the communication to the target group will be top-down. It refers to an accumulation and actualization of the immense resources every society are in command of with regard to knowledge and energy.

Group meetings is an important information channel in the Solomon Islands, too. Docu-dramas and role-plays are also beneficial, as are drawings. Visual material seems to evoke great interest and provoke many and lengthy discussions. It is most important, however, to get the confidence among the target group. This is done by going to the field and stay there for some time, a week or two. Meetings with ghetto blasters are very popular as are minor competitions with prize winners. Ordinary lectures will not do it. People have had more than enough of them. But if one goes out into the villages and tell the people to come to meetings where they can win some prizes, they will come. There should be a 1st, 2nd. and 3rd price. In the Solomon Islands, education with a twist of humor, is a very effective mean of communicating messages. But the messages should not be conveyed in school English, preferable in the vernacular.

Not only should volunteers go to the villages, significant people should come as well. And at the same time the village project is under way the schools should have a work program dealing with exactly the same problems, so whenever the students go home, they can discuss it with their family members in the village. The messages in the awareness programs should be disseminated by well-organized radio messages too, newspapers should write about it and videos should be distributed. In shops non-offending posters that create smiles and invite for discussions should appear. There should thus be a coordinated effort from the involved significant parties to give clear information about a certain topic.

Likewise, any educational work to counteract the rapidly developing use of alcohol, marijuana and drugs, should include information on how the psychoactive substances effect the body. It should not—as has been unsuccessfully tried in Europe—be a campaign that scares people but a campaign that in a positive way educates people about the deleterious long-term effect of the consumption of psychoactive substances. A well-prepared awareness program could be an eye-opener for the local people.

As Marshall (1991) observed: "Education by itself never prevents anything—indeed, some have argued that knowledge about alcohol and drugs actually *increases* usage." Well, it depends on what kind of message is communicated. If it has a cultural meaning that creates resonance at the receivers end, and if it is presented in a cultural meaningful way, it can be effective. Who says educational programs should be based on Euro-American principles?

CONCLUSION

The Solomon Islands are witnessing an important shift in their socio-political and economic structure. The country is going from a traditional society based on subsistence economy to a monetary based society. Old traditional values and norms are expeditiously replaced by different western values. The technological advances has intensified the mobility of the islanders. Many young people are drawn to the capital for education, entertainment and dreams of an easier life than in the villages they left. Unfortunately for many, the real world in Honiara does not look so promising upon arrival as expected. The social bonds to *wantoks* becomes more and more important and as a temporary compensation for the emptiness experienced in a world where there are no jobs, where education is based on western principles and the young people activate themselves by roaming the streets consuming psycho-active substances. Without any meaningful challenges in life, with a rejection of the traditional village life they left and with no possibilities in the modern society, one will see more and more of the cultural disintegration process which already has started over the next years. Likewise, the next decade will see the results of many years abuse of tobacco, alcohol and drugs, in the form of a significantly greater morbidity and mortality rate than before, not to mention the social and psychological consequences that follow in its wake. The drug scene in the Solomon Islands is very dangerous and develops fast. It is a course for concern. The influential people who have the means to counteract this development

should take their responsibility seriously—time is running out fast. Crying wolf is too late—the wolf is already there—and this time for real.

REFERENCES

Annual Report 1969 (1970). British Solomons Protectorate, Honiara.

Bennett, J. (1987). *Wealth of the Solomons. A history of a Pacific Archipelago, 1800–1978.* Honolulu: University of Hawaii Press.

Berg, C. (in preparation). The Emergence of the Leisure Class: Conspicuous Consumption in Honiara, Solomons Islands. Working Paper to be presented at the Forum for Pacific Studies, Spring 2002. Department of Social Anthropology, University of Bergen.

Berg, C. (2000). Managing Difference: Kinship, Exchange and Urban Boundaries in Honiara, Solomon Islands. Bergen, Dep. of Social Anthropology. MA-thesis.

Carr, A. (1975). *Florida's Everglades*. Amsterdam.

Christiansen, S. (1975). *Subsistence on Bellona Island (Mungiki). A Study of the Cultural Ecology of a Polynesian Outlier in the British Solomon Islands Protectorate*. Copenhagen: C.A. Reitzels Forlag.

Collins, R. L., Parks, G.A. & Marlatt, G.A. (1981). Social Modeling as a Determinant of Drinking Behavior: Implications for Prevention and Treatment. *Addictive Behaviors*, 6:233–239.

Cushman, P. (1990). Why the self is empty. Toward a historically situated psychology. *American Psychologist*, 45(5):599–611.

Denzin, N.K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.

Desjarlais, R., Eisenberg, L., Good, B. & Kleinman, A. (1995). *World Mental Health. Problems and Priorities in Low-Income Countries.* New York/Oxford: Oxford University Press.

Donner. W.W. (1994). Alcohol, community, and modernity. The social organization of toddy drinking in a Polynesian society. *Ethnology*, 33(3):245–260.

Dugan, F. (n.d.). The Honiara drug and alcohol misuse training and awareness campaign. Honiara, Xerox-Copy.

Field, P.B. (1962). A new cross-cultural study of drunkenness. In D.J. Pittman & C.R. Snyder (Eds.) *Society, Culture, and Drinking Patterns* (pp. 48–74). New York: John Wiley & Sons.

FOSIY (n.d.). Report about drug and alcohol misuse. Xerox-copy.

Galtung, J. (1969). Violence, Peace and Peace Research.*Journal of Peace Research,* 6, 167–191.

Green R. C. (1977). *A First Culture History of the Solomon Islands.* Auckland: University of Auckland Bindery.

Health Education Quarterly, 1992 vol. 19.

Honan, M. & Harcombe, D. (1997). *Solomon Islands*. Australia: Lonely Planet Publ.

Horton, D. (1943). The functions of alcohol in primitive societies: A cross-cultural study. *Quarterly Journal of Studies on Alcohol*, 4, 199–320.

http:/www.odci.gov/cia/publications/factbook/bp.html (10.08.99).

http:/www.odci.gov/cia/publications/factbook/geos/bp.html (27.04.2001).

Hundsbæk, T. (2000). Fra sans og samling. *Politiken*, August 8.

IPPF Medical Bulletin (The International Planned Parenthood Federation). London, 2000, 34(2):1.

Jourdan, C. (1995). Masta Liu. In V. Anit-Talai & H. Wulff (Eds.). *Youth Cultural Perspectives.* London: Routledge, 202–222.

Kabutaulaka, T. T. (2000): Pacific Islands Report. http://pidp.ewc.hawaii.edu/pireport/2000/June/06-09-03.htm

Kelley, A. E. (1995). Psychoactive Substance Use Disorders. In D.L. Rosenhan & M.E.P. Seligman (Eds.) *Abnormal Psychology*. New York: W.W. Norton & Co, 511–536.

Kim, U. & Berry, J.W. (Eds.) (1993). *Indigenous Psychologies. Research and Experience in Cultural Context.* Newbury Park: Sage Publications.

Kirch, P. V. (2000). *On the Road of the Winds. An Archaeological History of the Pacific Islands Before European Contact.* Berkeley: University of California Press.

Kuschel, R. (forthcoming). *Laughable matters on Bellona Island*.

Kuschel, R. (1996). Managing Marital Conflicts on a Polynesian Outlier. In *Mind, Machine, and Environment: Facing the Challenges of the 21st Century* (pp. 85–97). Korea, Korean Psychological Association Seoul.

Kuschel, R. (1988a). *Vengeance is Their Reply: Blood Feuds and Homicides on Bellona Island.* Part 1: Conditions Underlying Generations of Bloodshed. Language and Culture of Rennell and Bellona Islands, Vol. VII:Part 1. København, Dansk psykologisk Forlag.

Kuschel, R. (1988b). *Vengeance is Their Reply: Blood Feuds and Homicides on Bellona Island*. Part 2: Oral Traditions. Language and Culture of Rennell and Bellona Islands, Vol. VII:Part 2. København, Dansk psykologisk Forlag.

Kuschel, R. (1988c). "A Historical Note on the Early Contacts between Bellona and Rennell Islands and the Outside World." *Journal of Pacific History*, 1988, 23(2):191–200.

Kuschel, R., Takiika, 'A. & 'Angiki, K. (1999). "Aspects of social stratification and honor on pre-Christian and modern Mungiki (Bellona Island)." *South Pacific Journal of Psychology,* 11(1):54–70.

Lehane B. (1977). *The power of plants.* New York: McGraw-Hill Book Company.

Marshall, M. (1999a). Country Profile on Alcohol in Papua New Guinea. In L. Riley & M. Marshall (Eds.). *Alcohol and Public Health in 8 Developing Countries* (pp. 115–133). Geneve: Substance Abuse Department, Social Change and Mental Health, World Health Organization.

Marshall, M. (1999b). "Alcohol and Gender in the Pacific Islands: Changing Patterns and Changing Practices." Paper read at the 25th Annual Alcohol epidemiology Symposium of the Kettil Bruun society, Montreal, Canada.

Marshall, M. (1993). A Pacific Haze: Alcohol and Drugs in Oceania. In V.S. Lockwood, T. G. Harding & D. L. Oliver (Eds.). *Contemporary Pacific Studies. Studies in Development and Change* (pp. 260–272). Englewood Cliffs, NJ: Prentice Hall.

Marshall, M. (1991). Beverage alcohol and other psychoactive substance use by young people in Chuuk, Federated States of Micronesia (Eastern Caroline Islands). *Contemporary Drug Problems,* 18(2), 331–371.

Marshall, M. (1988). Alcohol Consumption as a Public Health Problem in Papua New Guinea. In *The Int. J. of the Addictions*, 23(6), 573–589.

Marshall, M. (1987). 'Young Men's Work': Alcohol use in the contemporary Pacific. In A.B. Robillard & A. J. Marsella (Eds.) *Contemporary Issues in Mental Health Research in the Pacific Island* (pp. 72–93). Honolulu: Social Science Research Institute, University of Hawaii.

Marshall, M. (1979). *Weekend Warriors: Alcohol in a Micronesian Culture*. Palo Alto: Mayfield Publ. Co.

Na Makupuna (n.d.). Manifesto. Xerox-copy.

Naesol, J. (1995). *Solomon Islands 1993 Statistical Yearbook.* Honiara, Solomon Islands: Statistics Office, Ministry of Finance.

Schenk, G. (1956). *The book of poisons*. London: Weidenfeld & Nicolson.

Sinha, D. (1993). Indigenization of Psychology in India and its Relevance. In U. Kim & J. W. Berry (Eds.) (1993). *Indigenous Psychologies. Research and Experience in Cultural Context* (pp. 30–43). Newbury Park: Sage Publications.

Solomon Islands Handbook (nd). Honiara, Solomon Islands Information Service.

Statistical Bulletin No 2/99. External Trade. Statistics Office, Ministry of Finance, Honiara.
Statistical Bulletin No 3/99. External Trade. Statistics Office, Ministry of Finance, Honiara.
Statistical Bulletin No 5/99. External Trade. Statistics Office, Ministry of Finance, Honiara.
Statistical Bulletin No 6/99. Employment 1996. Statistics Office, Ministry of Finance, Honiara.
Statistical Bulletin No 1/98. External Trade. Statistics Office, Ministry of Finance, Honiara.
Statistical Bulletin No 17/98. Honiara Retail Price Index April–May 1998. Statistics Office, Ministry of Finance, Honiara.
Statistical Bulletin No 10/97. Report 2: Village Resources survey 1995/6, July 1997. Honiara: Statistical Office, Ministry of Finance.
Turner, V. (1974). *Dramas, Fields, and Metaphors.* Ithaca, Cornell University Press.
United Nations Development Programme (UNDP), Fiji Oct. 1986.

Chapter 11

Building Capacity for Epidemiologic Surveillance of Alcohol and other Drug Problems in the US-Related Pacific Islands

Amelia M. Arria, Ph.D. and James C. Anthony, Ph.D.

INTRODUCTION

Over the past decade, much attention has been focused on the health care needs of the roughly 500,000 individuals residing in the U.S. Associated Pacific Island jurisdictions (e.g., Guam, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Republic of Palau, and the Republic of the Marshall Islands). These six jurisdictions are culturally and politically distinct and are dispersed across an area of 60 million square miles in the western and south Pacific Ocean. Comparatively, the health of residents living in these island jurisdictions is much more compromised than for mainland Americans. The health care delivery systems are faced with problems of "epidemiologic transition", that is, where health problems are seen that are typical of both the developing regions of the world (e.g., malnutrition, tuberculosis, dental caries, dengue fever, cholera) in addition to the health problems of the developed world (e.g., cancer, heart disease, diabetes).

In June 1997, the Deputy Secretary of the Department of Health and Human Services announced the establishment of a Department-wide

Asian American and Pacific Islander Initiative. This initiative was formed to address the ongoing concerns about the health needs of Asian Americans living on the mainland and those living in the Pacific Islands. A study by the Institute of Medicine (IOM) reveals major gaps between the need for basic health care services and what is being delivered. The IOM report states:

"In the delivery of health care services many challenges must be overcome. These include: administrative structures that emphasize hospital-based acute care; the long distances that must be covered to provide care to people in remote areas; dependence on foreign aid, inadequate fiscal and personnel management systems; poorly maintained and equipped health care facilities; the enormous costs involved with sending patients off-island for tertiary or specialized care; and shortages of adequately trained health care personnel. In many cases, the island jurisdictions are also contending with significant social change brought about by incredible population growth, rapid economic development, and a shift away from a life based on communal farming and fishing to one that is market and consumer oriented. Attempts to address these health conditions and challenges come at a time when U.S. federal government aid to the region has begun to decrease, a trend that is likely to continue. These challenges are also embedded in the islands' many strengths and resources: cultures that remain vibrant even after years of foreign occupation and influence, strong familial ties and roles for women, highly developed and organized communities, traditional health practices, and powerful religious beliefs."

As part of a larger ongoing effort by the Substance Abuse and Mental Health Services Administration (SAMHSA) to improve the delivery of alcohol and other drug treatment services in the region, the project described herein aimed to build the capacity for epidemiologic data collection pertaining to alcohol and other drug problems and related physical and mental health conditions in these six U.S.-associated Pacific Island jurisdictions.

Problems Associated with Alcohol and Drug Misuse

Problems associated with alcohol misuse and drug-taking have been a long-standing problem throughout Micronesia as well as other areas of the Pacific region. In some parts of the region, increasing rates of suicide (especially among adolescents and young adult males), as well as alcohol-associated motor vehicle crashes, are a matter of great concern. Recently completed needs assessments in the three Freely Associated States (Palau, Federated States of Micronesia, and the Marshall Islands) identify alcohol abuse as a major health problem. The findings indicate that there are over 11,000 problem drinkers in the Federated States of Micronesia and

2,600 in the Marshall Islands, the overwhelming majority of whom are male between the ages of 30 and 44. On average, alcohol accounts for 5% of all deaths in the Freely Associated States, over 80% of all arrests, and more than 48% of all suicides. Suicide is leading cause of death in many of the jurisdictions. In the Federated States of Micronesia, the annual rate is 30 per 100,000 people, mostly young men. The suicide rate in Guam, although lower than in Micronesia, is still higher than in the continental U.S.

Marijuana is also commonly used by young males throughout Micronesia, especially by those between the ages of 15 and 44. In Guam and the Northern Mariana Islands, the use of methamphetamine ("ice") is reaching epidemic proportions. Reports indicate that methamphetamine use has spread to Palau and American Samoa, and there are concerns that these jurisdictions may soon face similar epidemics.

A first step in improving the delivery of services for alcohol and other drug problems is to clarify the nature and extent of alcohol and drug problems in various segments of the community through epidemiological surveys. These surveys can be used not only to estimate the extent to which the population is affected, but to identify potential targets for intervention. Because of a lack of local expertise in the areas of epidemiologic surveillance, guidance was provided from a team of public health researchers from the Johns Hopkins University School of Hygiene and Public Health to conduct training sessions on basic epidemiologic surveillance methods and to guide the local personnel in the collection of local data in the schools and in primary health care settings. Since 1996, the JHU research team had previous experience in working with the local leaders, drug treatment providers and other members of the community to provide technical assistance and training, albeit limited, related to epidemiologic surveillance. The overarching goal of the project was to increase the interest of local community leaders to become self-sufficient in their ability to conduct epidemiologic surveys.

Another important aspect of the project involved fostering the development of a collaborative network among various government agencies and non-government organizations working within the region (inclusive of community-based constituent and consumer groups) in order to proactively explore ways to improve the quality and availability of prevention, treatment, and rehabilitative services in the region. The Community Epidemiologic Workgroup (CEWG) of the National Institute on Drug Abuse (NIDA) was offered to local leaders as one possible regional model to follow.

Not only between these nations and territories, but also within them, there can be found remarkable variation in traditional values, language,

and other aspects of culture, including modes of delivery of health and human services. In this respect, the conditions surrounding delivery of alcohol and other drug treatment services are no exceptions. Thus, although regional approaches to development, needs assessment, and training of service personnel can be contemplated for reasons of cost savings and efficiency, these approaches can be expected to fail unless they are designed to include careful attention to the differences between and within the participating jurisdictions.

Project Objectives

In summary, the specific objectives of the project were:

1. *To continue training sessions on data collection, management, analysis, and report-writing in American Samoa, Guam, the CNMI, the Republic of the Marshall Islands, the Federated States of Micronesia and the Republic of Palau.*
2. *To assist the Northwest Frontier Addiction Technology Transfer Center in the design and implementation of a survey of key informants concerning training needs in the region.*
3. *To assist in the development and coordination of local epidemiologic surveillance networks to monitor new and emerging problems in the region.*
4. *To assist in the development of collaborative relationships between the jurisdictions and agencies and organizations to maintain stability of funding for surveillance activities.*

SURVEY OF EXISTING CAPABILITIES AND TRAINING NEEDS

As an initial step in the process of developing training materials, a survey was conducted with key officials on each island about their existing capacities for information management, data collection and analysis. The survey also provided a way for the JHU project staff to introduce the concept of an epidemiologic workgroup to local leaders, in particular, to the directors of treatment programs. Following the survey, local individuals were asked about preferences on logistics of training sessions that would be held in the Fall. The results of the interviews with individuals from each of the jurisdictions as well as a summary of common general needs is summarized below.

Summary of Results in Each Jurisdiction

Table 11.1 below presents the responses from representatives from each jurisdiction on issues of resources and treatment capacity. Where more than one person was interviewed, the responses from the person with the closest working relationship to the treatment center was used.

At least one representative from each of the six jurisdictions was interviewed. As can be seen from Table 11.1, all of the local government offices except for Chuuk have internet access; this is significant for expediting the transfer of information, and more importantly, for facilitating distance education via the World Wide Web. With respect to the capacity for database management, it is apparent from this survey as well as the experience of the authors that this is an area that will require ongoing training and technical assistance. One of the most significant rate-limiting steps in learning database management skills is the absence of time to learn and practice within a clinical environment. However, it is believed that the optimal solution to solve this problem is to form collaborative working relationships with local university faculty and students to provide database management services to local health departments. Through the facilitation of the JHU research team, an arrangement between the University of Guam and the Department of Mental Health and Substance Abuse on Guam has begun and has proved to be quite successful.

In Table 11.1, it is apparent that there is not only a shortage of clinical staff on each jurisdiction to fill the need for adequate treatment service delivery, but also a need for enhanced education, training and certification. This is of no surprise to individuals who are familiar with the health care service delivery system of these jurisdictions, and confirms the impression of the IOM task force.

Respondents were asked a number of specific questions about the characteristics of individuals presenting for alcohol and drug treatment, and then asked to report on their level of confidence of these estimates. Only the CNMI reported a rating of "very confident". Although most were confident in the actual number of clients seen, there was limited information about their characteristics.

When asked about standard alcohol and drug assessment tools being used in the clinical environment, few reported the use of any standard clinical instruments. This is unfortunate given the range of tools currently available. Again, many individuals expressed that the absence of education and training was at the root of this problem.

Tables 11.2 and 11.3 document the level of need in a number of different areas relating to epidemiologic surveillance training. The jurisdictions, for the most part, were consistent on most items, citing a high or some

Table 11.1. Summary of Survey Responses Regarding Clinical Resources in Each Jurisdiction

Jurisdiction	Internet Access	Database Management	Number of FT Clinical AOD Staff	% FTE with only Bachelor's Degree	% FTE with more than Bachelor's Degree	No. AOD Clients seen Annually	Confidence in Estimates Describing Tx Population	AOD Assessment Instruments Used	Types of Treatment Available
American Samoa	X	N/A	4	2	0	900–1000	Somewhat	Family History Form, Anger Instrument	Individual and Group Counseling
CNMI	X	Software is available, but need training on use	10	2	6	1050	Very	Individual Assessment Tool and MAST	Assessment for detox/Individual Intensive Outpatient/12 step Aftercare program
Guam	X	Software is available, but need training on use	17	2	2	828	Somewhat	Drug and Alcohol Intake Assessment developed by treatment provider	Residential, 16 hour day treatment of 6 weeks, aftercare of 6 months, 12 step, referral to TC
Palau	X	N/A	3	0	1	100	Somewhat	CAGE	Outpatient/ Inpatient detox, AA
Republic of the Marshall Islands	X	Use Epi-info	6	1	1	65	Somewhat	Alcohol Use Inventory, Diagnostic Interview Schedule	Outpatient/jail-based/12 step
Federated States of Micronesia (only 3 states responded to survey)									
YAP	X	N/A	2	1	1	85	Somewhat	none	Inpatient-short term/outpatient/ counseling
POHNPEI	X	Software is available, but need training on use	1	1	0	269	Not very	none	Outpatient treatment
CHUUK	no	Epi-info and Excel	12–14	1	1	73	Not very	none	Outpatient service

Table 11.2. Rating of Need for Epidemiologic Surveillance Training by Jurisdiction

	High level of need	Some need	Not very much need	No need
Someone on staff to design questionnaires with data capture forms?				
American Samoa	X			
Commonwealth of the Northern Mariana Islands	X			
Guam	X			
Palau		XO		
Republic of the Marshall Islands		XO		
Chuuk	X	O		
Yap	X			
Pohnpei	X			O
Someone on staff to create and document databases using computer software?				
American Samoa	X			
Commonwealth of the Northern Mariana Islands	X			
Guam	X			
Palau	O		X	
Republic of the Marshall Islands	O		X (Using Epi-Info)	
Chuuk	X	O		
Yap	X			
Pohnpei	XO			
Someone to develop culturally sensitive instruments to ensure that the people's cultural background is considered when asking questions?				
American Samoa	X			
Commonwealth of the Northern Mariana Islands	X			
Guam		X		
Palau	XO			
Republic of the Marshall Islands		XO		
Chuuk		XO		
Yap	X			
Pohnpei	X			O
Someone who can perform statistical analyses to be able to make sense and get an understanding of what came out of the survey?				
American Samoa	X			

(*Continued*)

Table 11.2. (*Cont.*)

	High level of need	Some need	Not very much need	No need
Commonwealth of the Northern Mariana Islands	X			
Guam	X			
Palau	O	X		
Republic of the Marshall Islands	O	X		
Chuuk	O	X		
Yap	X			
Pohnpei	X	O		
Someone who can conduct focus groups to come up with the best and easiest way to collect reliable information?				
American Samoa		X		
Commonwealth of the Northern Mariana Islands	X			
Guam	X			
Palau	O	X		
Republic of the Marshall Islands	O		X	
Chuuk	XO			
Yap	X			
Pohnpei	X		O	
Someone who could be in charge of ensuring that data is collected in such a way that research subjects are protected and that data is kept confidential?				
American Samoa	X			
Commonwealth of the Northern Mariana Islands		X		
Guam	X			
Palau	O	X		
Republic of the Marshall Islands	XO			
Chuuk	XO			
Yap		X		
Pohnpei	X		O	
Someone who is familiar with data collection methods?				
American Samoa	X			
Commonwealth of the Northern Mariana Islands	X			
Guam	X			
Palau	XO			
Republic of the Marshall Islands	XO			
Chuuk	XO			
Yap	X			
Pohnpei	X			O

Table 11.3. Responses to the question: "Overall, what is your most important training need in the substance abuse or mental health area?"

American Samoa	"Diagnostic skills for drug, alcohol and mental health. Intervention skill for counselors in both units. Use of standard inventories to assess level of substance use and abuse".
Commonwealth of the Northern Mariana Islands	"The CNMI's ongoing ice problem is in serious need of some type of inpatient or residential treatment facility/program. Our program would greatly benefit from training in the area of designing questionnaires, data collection, data input and analysis. In addition, we need training in conducting effective program evaluations. With regard to treatment, training in enhancing treatment service delivery is also needed on a continuous basis, especially because of the geographic isolation of our islands".
Guam	"In substance abuse, certification programs to fulfill standardized requirements. In mental health, skills in diagnostic impression according to DSM-IV criteria and [matching clients to] appropriate treatment modalities".
Palau	"There is a great need for someone to design a needs assessment for mental health and also one for substance abuse prevention".
Republic of the Marshall Islands	"...data tracking and data collection".
Federated States of Micronesia	POHNPEI: "counselor certification, training of trainers, training of prevention specialists, training of data clerks, computer training". CHUUK: "The outreach programs on Chuuk are very extensive and time-consuming. SAMH staff has people go out to villages both by land (bus) and by sea (motorboats and ships). Sometimes, they must travel 150 miles to reach some people of Chuuk State. I am most concerned with the very high suicide rate that has been attributed to alcohol. Also, increased drug use, especially marijuana has been related to more injuries occurring." YAP: "providing effective substance abuse treatment".

level of need for most items, with exceptions occurring in Palau, the Marshalls, and Pohnpei.

OVERVIEW OF TRAINING ACTIVITIES

Content of Training Modules

The training workshops focused on assisting the jurisdiction to develop sustainable capacity to initiate and implement needs assessment activities. It should be noted that the topics covered in this workshop, although presented in relation to needs assessment for alcohol and drug treatment services, were presented in such a context to be generalizable to

other needs assessment activities of interest to the jurisdiction (e.g., assessment of maternal and child health needs). The format of the presentations was somewhat informal and allowed for question and answer periods as well as small break-out groups on specialized topics.

The presentations by Drs. Anthony and Arria were organized in relation to three groups of functions for needs assessment and epidemiologic survey activities. The first group pertains to *executive functions* expressed during the planning, execution and follow-up needs of needs assessment surveys. The second group pertains to *operational functions*. The third group pertains to *technical* functions. To some extent, these functions can overlap, not only in content, but also within individuals. For example, there are some (rare) individuals who have mastered all of these functions and might be able to carry out a complex needs assessment survey with no more than minimal assistance.

Nonetheless, more typically these functions are shared across individuals, and team work is required to coordinate the exercise of these functions. The leadership required to make teams work is an example of an executive function in the sense that it requires decision, control, and planning at a high level.

Executive functions of this type often are supported by operational functions. In the case of team work, these operational functions include the administrative support required to coordinate work schedules effectively so that a team can meet on time and without absences of key members. Setting up a team meeting is an operational function, which can be distinguished from executive functions and technical functions.

The technical functions for needs assessment activities are separated from executive and operational functions mainly for pragmatic reasons having to do with resource allocations. In our experience, most departments and ministries of health and human services have leaders and staff members who already have mastered many of the executive and operational functions required to conduct needs assessments. These leaders and staff members might not have applied their mastery of these executive and operational functions to the completion of needs assessment work, but they have applied them in other tasks (e.g., in the successful delivery of services by a health department or a human services division).

The technical functions, like executive functions, require a high level of decision, control and planning, but they are even more specialized functions such as we call upon to specify required sample sizes for need assessment surveys or to estimate variances for the survey statistics. Many departments of health and human services do not have even a single staff member who has mastered this type of technical function. This poses a challenge when the departments wish to complete needs assessment surveys:

either a staff member must be trained to master these functions, or an outside expert must be secured. For the department that plans to conduct multiple needs assessments, there is good reason to allocate resources (e.g., training, monies) so that a member of the regular staff masters these technical functions. Otherwise, it might be more sensible to allocate resources to recruit a suitable consultant or expert each time a survey must be completed.

The following sections provide a capsule summary or descriptive example of each function, organized by each of the three groups.

Executive Functions

1. *Political action*: One of the most important executive functions for needs assessment involves political action. When a department head has mastered this function, we can see the necessary personnel and resources become mobilized to complete the needs assessment activities, to follow through with a meaningful interpretation of the needs assessment results, and to translate these results into practical public health or human services activities. When this function has not been mastered, the needs assessment activity fails at one or another stage of development, not because of technical problems, but due to failures of political will. Examples can be found of surveys that have failed because the department head did not bother to secure the authorization (or at least an "okay") from appropriate community leaders or governmental officials. Other surveys are completed through the stage of data gathering, analysis, and report writing, but incomplete exercise of the political action function leads to a decision that the survey results should not be released or made public for fear of embarrassment or political outcry. Thus, the importance of this particular executive function cannot be underestimated because it can lead to massive waste and loss of morale.
2. *Administration/organization*: This executive function sometimes can be seen first most clearly in a sensible organizational chart with clear lines of authority and responsibility, but later in the smooth translation of higher-level policy decisions to lower-level procedural actions. When this function fails, the executives start working on implementation of procedures, rather than devoting their attention to crafting of policy and correcting poorly framed policies and procedures.
3. *Scientific Planning*: Although some have avoided the term "science" in relation to needs assessment activities, this distracts us from the essential similarity between the activities needed to gather and

interpret scientific evidence and those needed to gather data and extract needs assessment information from those data. Those who have mastered the scientific planning function can draw upon generalizable principles, concepts, and methods that are common to all branches of science, and bring them to bear to needs assessment activities. For example, the master of the scientific planning function would know the difference between the validity or accuracy of an assessment technique versus the reliability of that assessment. Though perhaps not fully versed in how to assess validity or reliability, he or she would make sure the underlying issues—were addressed by calling upon a technical expert in psychometrics or the other measurement sciences in order to make sure the needs assessment data are valid and reliable.

4. *OHRP Evaluation*: In the U.S., the OHRP is the cognizant federal agency responsible for overseeing protection of human subjects who might be recruited for participation in needs assessments or other investigations. No needs assessment data should be gathered without attention to these issues at the highest level of authority within the administrative structure for the needs assessment activities. This executive function involves weighing the potential benefits of the investigation (e.g., knowledge for the public good) against the potential risks for harm (e.g., disclosure of potentially embarrassing or socially damaging information about an individual's drug-taking). Whereas some of the technical OHRP details can be delegated to a technical expert (e.g., writing a disclosure statement at an appropriate level of verbal comprehension), this type of decision making about benefits and risks cannot be delegated to a technical expert.
5. *Scientific Interpretation*: Interpreting one's data is an executive function that involves a translation of the gathered data into meaningful units of information of practical value. The technical expert in statistics can produce an estimate for the prevalence of drug dependence, with a 95% confidence interval to express the precision of the estimate, and the statistician can tell us whether one group has a higher prevalence than another group. However, the interpretation of the observed difference does not belong solely in the domain of this technical expert because the interpretation can hinge upon specialized knowledge of the population or the underlying dynamics in a population. The critical nature of this interpretive function can be appreciated in the example of pellagra, which for years was regarded as a disease of infectious origin until Goldberger evaluated the available epidemiologic and clinical evidence, conducted his

own surveys and experiments, and demonstrated that pellagra was caused by a deficiency of niacin in the diet and not at all by an infectious agent.

In needs assessment work, similarly complex interpretive issues are encountered. For example, two sub-groups of the population can be observed to have a similar level of apparent need for services (e.g., as shown by equal proportions affected by the problem), but different volumes of service utilization. Does this kind of imbalance between estimated need and service volume require action? What type of action? Should the imbalance be traced back to (a) lack of access; (b) lack of financing; (c) inappropriate client-provider interactions (e.g., lack of sensitivity to cultural or ethnic variations), or to any of the other many possible explanations. These are not statistical or technical issues, but rather they are interpretive issues that must be faced by the executives responsible for the needs assessment.

6. *Scientific communication*: Executive decisions must be made about what needs assessment results are communicated and the form in which they are expressed. Results from valid needs assessment surveys should be shared in the public health and human services research literature, if only to document empirical observations or methodological successes or problems that will help others make advances in future work. The executive responsible for leading the survey should take responsibility for the work as senior author, designated either by first or last position in the authorship.
7. *Policy analysis*: Every good needs assessment survey has policy implications, and one of the executive functions for needs assessment is to translate the survey data into policy-relevant findings and to communicate those policy-relevant findings effectively.

Operational Functions

1. *Fiscal management*: It is quite easy to incur cost over-runs in needs assessment activities. Effective fiscal management is key.
2. *Personnel management*: Given the array of functions required to conduct a successful needs assessment, it is typical for a number of individuals to be deployed for completion of the activities or to be recruited specifically for these tasks. The needs assessment unit needs support from an effective personnel office, capable of recruiting, screening, hiring, and helping to retain qualified personnel and technical experts who can serve as temporary consultants.

When line staff are detailed to complete needs assessment work, the personnel management functions must attend to coverage of their ordinary line responsibilities while they are detailed to the survey work. The consequence of ignoring this aspect of personnel management can include crises at the personal client level (e.g., those who didn't receive sufficient attention while a service provider was working on a needs assessment), as well as a messy aftermath of neglect, faced once the assessment activities are completed, and the staff member returns to the regular line responsibilities of his or her job.

3. *Clerical staffing*: Competent clerical staff are essential to the success of a needs assessment, not only for scheduling team meetings as mentioned above, but also for keeping minutes, records of decisions and the rationale for those decisions, filing correspondence about the assessment, and keeping track of individual assessment forms as well as survey tracking reports.
4. *Supervisory functions*: Many needs assessment surveys employ one or more full-time supervisors to help the survey executive(s) ensure effective implementation of policy and to help promote quality of the survey work. The only exceptions are very small-scale needs assessment surveys, and even in those instances, a member of the assessment and data gathering team can be called upon to function as a team-leader and supervisor to promote quality work by other staff members.
5. *Standardized field operations*: The data for a needs assessment are gathered via "field operations" whether these involve interviews administered over the telephone, face-to-face interviewing, or self-administered classroom surveys. This operational function refers to these data gathering operations as well as ancillary operations such as developing trust and rapport before gathering data, which may be carried out by college students, nursing students, nurses, social workers, or others with or without formal credentials and advanced technical training. However, every assessor typically needs at least one full day of training for assessments and other aspects of the field operations (e.g., securing informed consent).
6. *Standardized clinical operations*: Many needs assessment surveys draw upon specialized clinical skills or knowledge, for example, as represented by a standardized assessment of blood pressure or a standardized psychiatric examination. Whereas many clinicians are experienced at taking these assessments under ordinary conditions of clinical practice, the operational functions of a

needs assessment typically require more specialized training and sometimes specialized equipment (e.g., random digit sphygmomanometer to reduce bias in blood pressure readings).

7. *Data entry*: This operational function entails a transduction of the gathered data into machine-readable form, either via keypunching or keying data to a disk, optical scanning, or computer-assisted data gathering at point of contact with a participant (e.g., a computer administered test).
8. *Data documentation*: Once entered into machine-readable form, the raw data must be converted into a manageable database, with suitable documentation and codebooks. The documentation and codebooks ensure that the data analysts understand the conditions under which the data were gathered, describe the frequencies and distributions of the characteristics surveyed, and list all variables and values in the dataset in order to promote effective analyses and interpretation.
9. *Programming/Network Administration*: Even when the needs assessment requires no more than a single computer, a staff member must master the required programming and network functions to support the needs assessment, if only to assure adequate back-up of the survey data and storage of duplicate datasets where they can be located easier when an original fails. Often, effective data analyses involve networking of multiple computers and storage of the dataset on a file server.
10. *Data Analysis*: Basic data analyses such as frequency distributions and cross-tabulations can be carried out by personnel with no specialized or advanced training in statistics or epidemiology, although there is need for adequate supervision and guidance. With such supervision, the data analysts can undertake more advanced analyses as well.
11. *Data Reporting*: This function refers to the craft of table and figure preparation so that frequencies, distributions, and survey estimates are presented clearly and in a readily understandable form. This is an operational function that can be carried out with the supervision of a technical expert or a technically knowledgeable survey executive.
12. *Desktop Publishing*: If necessary, this function can fall back to clerk-typists and, if available, graphic artists on staff. However, modem computational equipment and software make it possible to prepare publication-ready material that can rival professional products in appearance. Even if there is no more than a basic PC or Mac computer and standard word-processing and database

management program, the staff can use principles of desktop publishing to produce reports that are attractive and enjoyable to read.

Technical Functions

1. *OHRP Principles*: Whereas evaluation of benefit/risk ratios qualifies as an executive function, there is a set of technical functions associated with implementation of the OHRP principles. This includes designing the approach to securing informed consent, writing the language of the disclosure and consent statements so that the participants can understand it, and both specifying and supervising the field staff responsible for implementing approved human subjects protections.
2. *Clinical Science*: Most needs assessments in the health and human service sectors call upon clinical science, most often in the assessment realm, For example, in drug dependence surveys, the technical expertise of clinical scientists is necessary to help the survey executives be confident that the gathered data are being interpreted properly. An example of a technical function associated with clinical science in a recent survey involves telephone assessment of drug and alcohol dependence. As designed, the survey method uses the reported date of the most recent drug or alcohol problem to specify whether the respondent has a currently active need for services. Clinical science perspectives are needed to evaluate whether this decision is appropriate, or whether it might be more appropriate to specify currently active needs in relation to recent heavy drinking or drug-taking, even when some time has passed since the last catastrophe or problem associated with drinking or drug use.
3. *Survey Statistics: Sampling*: This is a critical technical function for needs assessment surveys. It is an exceptional circumstance when a needs assessment can be carried out without sampling (e.g., when all members of a population can be surveyed). A technical expert in survey sampling is helpful to promote efficient use of resources, even when all population members are sampled. The requirement for this technical help becomes acute and essential when complex survey sample designs are used (e.g., when only one member of a household is selected for participation from among all potentially eligible members of the household).
4. *Psychometrics*: In the past, it was possible to declare that an assessment instrument had been validated or shown to be accurate and reliable, drawing upon published studies of the instrument. At

present, there is no excuse for this practice. Rather, every needs assessment should be conducted with its own assessments of reliability and validity. The psychometric expert has tools to extract information about reliability and validity from the survey data, even without special research designs that might be used in the development of a new test or modification of an old test (e.g., the KR20 coefficient for internal consistency of a scale; the IRT and MIMIC models to identify test item biases).

5. *Staff training*: Specialists in adult education and staff training are invaluable for the development of training materials and the curriculum for the field operations staff and for other staff members who require some additional training for the needs assessment. Often training materials have been developed by others, but need to be adapted to the specific circumstances of a local area under study.
6. *Total quality management*: Total quality management experts can help design needs assessment studies and the interaction of survey team members, and can help monitor quality of performance. The benefits of TQM in data quality are assumed, but cannot always be demonstrated in each survey.
7. *Database and Network Design and Management*: Someone must select the computing environment that will be used to process, store, and analyze the data, as well as the statistical packages to be used, and must help train and supervise the staff who will maintain the databases and conduct the analyses. When multiple computers are involved, network design and management issues must be faced, and here too a technical expert is needed.
8. *Survey Statistics*: The statistical functions do not end with design of the sample, but rather extend through the analysis and interpretation stages of the needs assessment work. A relatively untrained data analyst can produce an estimate of how many people in a population are affected by alcohol or drug dependence, for example, provided the data are from a simple random sample. But a technical expert typically is needed to devise appropriate methods for estimating confidence intervals, or for conducting more advanced and probing analyses, particularly when complex sampling methods have been used (e.g., using the telephone survey method to identify one respondent per household or to identify two respondents per household).
9. *Technical Writing*: Few executives or operational staff members are experts at technical writing. A technical writing expert, even when called upon for a final review of the last draft of a report, can help to

avoid unfortunate misunderstandings and misinterpretations of tables or figures or text. Technical writing for needs assessments has a particular character, and requires proper use of technical language, as well as translation of technical terms (e.g., confidence intervals) into understandable lay concepts.

CONCLUSIONS AND RECOMMENDATIONS

In general, the training sessions, because of time constraints, were limited in scope and could not impart the level of technical skill training required for independent epidemiologic surveillance activities. However, the training sessions were useful in bringing people together who shared common interests, but were unfamiliar to each other before the training. Also, there was a great interest expressed from the attendants of the workshop for improved workforce competencies and data capacity development. The model of the NIDA Community Epidemiologic Workgroup was introduced and well accepted among attendants. There appeared to be a deep level of commitment to disseminating and exchanging information and resources throughout the region.

As a next step, local leadership development must be ongoing. Sustainable funding must be sought to develop collaborative linkages between individuals interested in developing the capacity to monitor alcohol and drug problems in the region, as well as to evaluate existing and new intervention programs.

Chapter 12

The Pacific Islands in Transition: Contrasts and Similarities

Anthony J. Marsella, A. Aukahi Austin, and Bruce Grant

CHALLENGES TO THE PAST, PRESENT, AND FUTURE

The Consequences of Rapid Social and Technical Change

While life in the Pacific Island nations was never as idyllic as some literary authors have suggested, it is clear that rapid social and technical changes are exacting a high toll on human health and well being among the populations discussed in this volume. The burdens imposed by Westernization, both through direct exposure and through the media, are numerous and there are emerging conflicts and tensions in virtually all aspects of daily life from food preferences to political processes. In and out migration, urbanization, changes in family and community life, increased poverty, unemployment, environmental changes, and corrupt government are all major sources of stress that will require extensive attention from each nation and from the international community.

For some, the changes that are occurring are positive and represent a transition phase necessary for the adaptation to the global community. They argue that change is inevitable, and that traditional cultures must accept this undeniable fact. They point to the pathologies and limitations of traditional cultures including rigid social structures, low mobility, widespread superstitions, and abuses of human rights, especially among women and children. But for many others, the changes are considered to

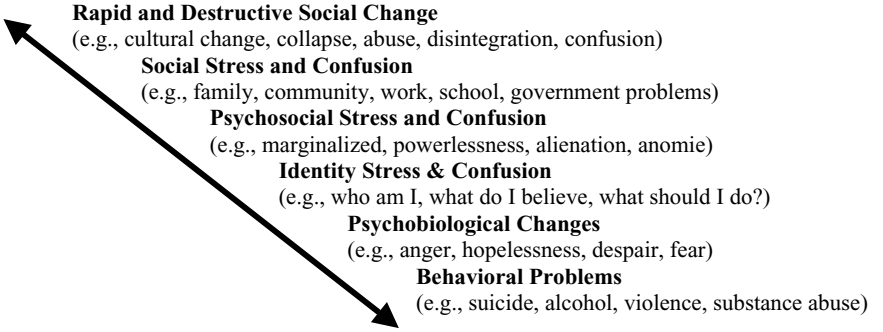

Figure 12.1. Sociocultural Pathways to Distress, Deviancy, and Disorder

be too numerous, too frequent, and too destructive to the social fabrics that have endured for generations. They claim the changes have left entire nations and communities in states of cultural conflict, cultural shock, and cultural deterioration. The result is high levels of vulnerability and risk among the people with growing levels of societal and individual distress, disorder, and deviancy. These are manifesting themselves as serious problems with substance abuse, alcoholism, suicide, and family and community violence. The distress, disorders, and deviancies that are now present, they argue, can be linked to the breakdown in social and personal identities emerging from the competing and contradictory life styles. Figure 12.1 offers a graphic representation of the pernicious consequences of the change process.

Human health and well-being are not simply medical problems to be solved by physicians and health services. Rather, they are closely tied to sociocultural and political processes. We cannot have health and well being where there is cultural destruction, because this breeds confusion and conflict. We cannot have health and well being where there is oppression, because this breeds anger and resentment. We cannot have health and well-being where there is powerlessness, because this breeds only helplessness and despair. We cannot have health and well being where there is poverty, because this breeds only hopelessness. We cannot have health and well being where there is denigration, because this breeds low esteem and worthlessness; we cannot have health and well-being where there is racism, prejudice, and sexism, because this restrains opportunity and limits choice (Marsella, 1997).

While some communities (e.g., American Samoa) report that their traditional cultural life styles are still holding up against acculturative pressures, the majority of the sites acknowledge that the exposures to Western

cultural lifestyles is leading to profound changes that are creating social upheavals and numerous health problems. These are the new social stresses of acculturation, culture conflict, future shock, and cultural disintegration and abuse. With these stresses come a new syndrome of problems that is showing up among traditional cultures around the world—the syndrome of mental and medical problems formed and sustained by cultural disintegration and collapse. Adeyo Lambo (2000), Deputy Director of the World Health Organization, coined the term "social breakdown syndrome," a widespread pattern of increased mental disorders, somatic disorders, prostitution, suicide, substance abuse, and medical disease that often accompany cultural collapse associated with change to describe these problems. The old and the young are particularly vulnerable but all segments of the population are subject to the pressures and subject to the problems that are associated with cultural disintegration and collapse.

In brief, the rapid social and technical changes overtaking many Pacific Island and Oceanic people must be dealt with more effectively because their consequences are exacting a serious toll on human health and well being among many people who were unprepared for either the changes or the consequences. Coping with the stress of change will not be easy. There will be a need for resources at individual, familial, community, national, and even international levels. Temporary and short-term efforts that focus on specific problems, while necessary, may not be sufficient. While there is every reason to believe that the admirable adaptive skills of the Pacific Island and Oceanic people will continue to offer creative and imaginative ways for addressing these changes and their consequences, the power and pace of the changes cannot be mediated without careful policy planning and service provision. This will require increased development of human and economic resources, as well as the increased cooperation across the region. Leadership, policy development, data collection, and effective service implementation are all necessary.

The chapter authors in this volume knew from the start that many previous attempts to collect data using western methods and instruments had been unsuccessful. Although there are existing data bases and a sizeable number of publications, data was often considered problematic. Further, the participants knew that while the data, once collected, could be extremely useful, it would also be necessary to address the acceptability of the methods for the intended populations, paying careful attention to the complex social and psychological nuances of the data collection process. This is often a neglected aspect of research in developing nations. Clearly, the optimal research process requires that the usefulness of the project be measured not only by the benefit gained from the final product, but also by whether or not participants view their own participation level

as meaningful. Too often, non-Islanders, well intentioned and talented, have been the source of knowledge, insight, and decision making. These researchers have made valuable contributions and their legacy will always be appreciated. But, the times require participation from Island people.

Each author was bound methodologically by the social, cultural, and political structures within their nation. In their efforts to provide as clear a picture as possible of the current state of affairs in each location, the authors made use of available resources and attempted to build capacity for research where there was none. The outcome of these efforts is a detailed picture of the strengths and needs for each population (See Table 12.1). Through a collaborative effort, these data were divided into broad Pacific recommendations that are largely applicable across groups and location-specific recommendations and that express how the authors see progress advancing in each location.

SITE OVERVIEWS

Site Strengths and Needs

A summary of strengths, uniqueness, and needs for the eight sites is presented in Table 12.1. As Table 12.1 indicates, there are considerable variations across the different sites. American Samoa is in the greatest need of surveillance capacity for substance abuse and related problems. Personnel resources in American Samoa are limited and existing personnel must fill many roles. Among the other United States associated sites (i.e., FSM, Guam, Hawaii, Marshall Islands), personnel resources were available for the project, but the time demands posed a serious problem because like American Samoa, the personnel must fill many different professional roles simultaneously because professional personnel capacity is low. Nonetheless, there are many human resource strengths in all of these sites that can be enhanced with additional training and support. The need for training programs for initial hires and continuing education training must be given a priority in budgets since the quality of personnel available for intervention and prevention activities could definitely reduce the problem levels.

Prevalence Data

Table 12.2 provides an overview of prevalence rates for alcohol, tobacco, marijuana, amphetamines, inhalants, betel nut, kava, suicide ideation and attempts, and violence. Sizeable percentages of respondents

Table 12.1. Site Strengths and Needs Overview

	Aboriginal Australia	American Samoa	Federated States of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Strengths	1) Strong involvement of research team members in professional research organizations.	1) Researchers were recruited directly from and involved in the local community.	1) Sampled directly from the community for their youths population.	1) Large youth population with new ideas and energy that can be utilized in developing and implementing prevention and intervention programs and research.	1) Effective implementation of 3-level model, with researcher, consultant, and expediter.	1) Collected additional data on measures of well being.	1) Campaigns launched through local media to reduce suicides have been effective. 2) Local para-professionals, such as counselors, can be mobilized and trained to conduct research and implement programs.	1) Collection of narratives and case studies that have provided tangible illustrations of the daily problems individuals must face.
Unique Contributions	1) Used pictures as a means of conveying amounts and types of substances rather than relying on language.		1) Served as ideal example of the implementation of the goals and purposes of the larger training and research program.		1) Highlighted importance of considering Ethnic identity in substance use.	1) Able to aggregate data based on individual respondents to allow for more in depth examination of relationships between other factors.	1) Highlighted the need to address non-academic and local media resources in prevention campaigns.	1) Use of qualitative data, including narratives, and case studies.

(*Continued*)

Table 12.1. (*Cont.*)

	Aboriginal Australia	American Samoa	Federated States of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Barriers/Needs	1) Difficulties approaching indigenous population for survey administration.	1) Lack of research resources and consultants. 2) Many other competing demands (e.g., community and professional) for the time and energies of research team.		1) Lack of family-oriented counseling and prevention programs. 2) No resources to train family counseling skills.				1) Current state of armed ethnic conflict on the Solomon Islands has scattered informants and prevented researchers from entering islands.
	1) Identify protective and risk factors that differentiate between those who become substance abusers and those who do not. 2) More family-based research	1) Provision of further research and statistical consultation and training.			1) In the data analysis, link the data obtained from each person to be able to identify patterns and relationships across different dimensions of a construct of interest.	1) Primary interventions for individuals, especially younger ones, who have not begun to use substances may minimize the need for secondary prevention following their initiation into regular use.	1) Develop databases to house psychosocial epidemiological data for the Pacific. 2) Explore theory-based approaches to examine the relationships between psychosocial indicators and outcomes.	1) Interventions should occur at the political level, the socio-economic level, and the social-psychological level. Such things include addressing unemployment and changes in the social norms for substance use.

3) Involve governmental agencies in the research 4) Aid in connecting with indigenous populations to conduct epidemiological surveys.	2) Intervention and prevention must involve a multi-dimensional approach using multi-agency cooperation and communication. 3) All forms of media must be utilized to inform the public and provide forums for people to discuss possible causes of social problems in Guam.	2) Prevention programs should address alcohol, tobacco, and other drugs at the same time because first use for these substances appear to occur at the same age.	3) Identify predictors of psychosocial outcomes.	2) Research should use a triangulation methods in the form of investigator triangulation, interdisci-plinary triangulation, methodological triangulation, and theory triangulation. 3) Clear and specific goals for research and intervention projects should be established to allow for guidance and later evaluation. 4) The resources available for interventions, such as economy, time, education, community and religious resources, and manpower, should be mapped out.

Table 12.2. Prevalence and Incidence Rates by Subject/Substance and Island Nation

Alcohol Use

Drank Alcohol

Prevalence Rates	Aboriginal Australia	American Samoa	FS of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Last 30 days	N/A	N/A	! no use—39% ! at least once—61%	! Avg # of times—1.5	! no use—65% ! 1–5 times—24% ! 6–10 times—4.1% ! 11–15 times—0.7% ! 20 + times—2.0% ! too many times to count—0.7%	N/A	N/A	N/A
Lifetime	N/A	N/A	! never drank—55% ! at least once—45%	N/A	! never drank—34% ! 1–10 times—25% ! 1–20 times—6.8% ! 21–30 times—4.7% ! 31–40 times—2.7% ! 41–50 times—3.4% ! 71–80 times—1.4% ! 91–100 times—3.4% ! 100 + times—4.1%	! Drank at least once—69%	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	! <12 y.o.—12.8% ! 13–17 y.o.—48.2% ! 18–24 y.o.—42% ! 25–29 y.o.—1.0% Average Age: 17.2	N/A	! <12 y.o.—29.4% ! 13–17 y.o.—53.2% ! 18–24 y.o.—16.5% ! 25–29 y.o.—0.9% Average Age: 14.3 Median Age: 15	N/A	N/A	N/A

Drunk or High from Alcohol								
Last 30 days	N/A	N/A	! none—33% ! 1–2 times—16% ! 3–4 times—10% ! 5–10 times—14% ! 10 + times—21%	N/A	! none—78% ! 1–5 times—12.2% ! 6–10 times—1.4% ! 11–15 times—0.7% ! 20 + times—1.4% ! too many times to count—0.7%	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	! never drunk—47% ! 1–10 times—26.4% ! 11–20 times—6.8% ! 21–30 times—2.0% ! 41–50 times—2.0% ! 71–80 times—1.4% ! 100 + times—3.4% ! too many times to count—8.8%	N/A	N/A	N/A
Tobacco Use								
Smoked Cigarettes								
Number of times smoked in last 30 days	N/A	N/A	! never smoked—81% ! 1–5 times—20% ! 6–10 times—3.0% ! 11–15 times—4.1% ! 16–20 times—3.0% ! 21–25 times—1.1% ! 26–30 times—1.4% ! 31 + times—2.5%	! Avg. # of cigarettes — 6.7	! never smoked—60% ! 1–5 times—10% ! 6–10 times—3.4% ! 11–15 times—2.0% ! 20 + times—11.5% ! too many times to count—8.1%	! at least one cigarette—17%	N/A	N/A

(*Continued*)

Table 12.2. (*Cont.*)

Prevalence Rates	Aboriginal Australia	American Samoa	FS of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Number of Cigarettes in last 30 days	N/A	N/A	N/A	! at least one cigarette—40%	! never smoked—63% ! 1–5 cigarettes—15% ! 6–10 cigarettes—3.4% ! 11–15 cigarettes—1.4% ! too many times to count—2.0%	! at least one cigarette—60%	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	! <12 y.o.—22% ! 13–17 y.o.—48% ! 18–24 y.o.—30% Average Age: 10.5 males: 10.5 females: 7.2	! Average Age: 16	! <12 y.o.—44% ! 13–17 y.o.—52% ! 18–24 y.o.—0.03% Average Age: 12.7 Median Age: 13	N/A	N/A	N/A
Smokeless Tobacco Use								
Last 30 days	N/A	N/A	N/A	N/A	! never smoked—89% ! 1–5 times—0.7% ! 6–10 times—3.4% ! too many times to count—1.4%	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	! <12 y.o.—14.6% ! 13–17 y.o.—51.7% ! 18–20 y.o.—27.8% ! 21–50 y.o.—3.5% Average Age: 16.1	N/A	! <12 y.o.—19% ! 13–17 y.o.—59% ! 18–24 y.o.—12.5% Average Age: 12.9 Median Age: 14	N/A	N/A	N/A

Marijuana Use								
Used Marijuana/Hashish								
Last 30 days	N/A	N/A	! no use—78% ! 1–5 times—25% ! 6–10 times—0.8% ! 11–15 times—0.5% ! 16–20 times—0.2% ! 21 + times—2.2%	N/A	! no use—79% ! 1–5 times—9.0% ! 6–10 times—2.7% ! 11–15 times—1.4% ! 20 + times—0.7% ! too many times to count—2.7%	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	! Used at least once—18%	! never used—59% ! Not much—0.7% ! 1–10 times—11% ! 1–20 times—4.1% ! 21–30 times—1.4% ! 31–40 times—0.7% ! 41–50 times—0.7% ! 71–80 times—0.7% ! 81–90 times—0.7% ! 91–100 times—0.7% ! 100 + times—4.7% ! Too many times to count—10.1%	N/A	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	! <12 y.o.—23.6% ! 13–17 y.o.—20% ! 18–20 y.o.—38% ! 21–23 y.o.—4.2% Average Age: 15.3	! Average age: 18	! <12 y.o.—20.6% ! 13–17 y.o.—64% ! 18–24 y.o.—11.1% Average Age: 14.1 Median Age: 15	N/A	N/A	N/A

(*Continued*)

Table 12.2. (*Cont.*)

Prevalence Rates	Aboriginal Australia	American Samoa	FS of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Got High from Marijuana/Hashish								
Last 30 days	N/A	N/A	! no use—79% ! 1–5 times—17.2% ! 6–10 times—0.8% ! 16–20 times–1.3% ! 21 + times—3.3%	N/A	! no use—78% ! 1–5 times—~9% ! 6–10 times—2.7% ! 11–15 times—0.7% ! 20 + times—2.7%	N/A	N/A	N/A
Lifetime	N/A	N/A	! never high—74.9% ! 1–10 times—19.6% ! 11–20 times—1.9% ! 16–20 times—0.2% ! 21 + times—1.9%	N/A	! never high—57.4% ! 1–10 times—12.2% ! 11–20 times—3.4% ! 21–30 times—1.4% ! 31–40 times—1.4% ! 41–50 times—1.4% ! 51–60 times—0.7% ! 81–90 times—0.7% ! 100 + times—5.4% ! Too many times to count—9.5%	N/A	N/A	N/A
Methamphetamines								
Used Methamphetamines								
Last 30 days	N/A	N/A	! no use—98.7% ! 1–5 times—1.3%	N/A	! no use—92% ! 1–5 times—1.4%	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	! Used at least once—5%	! never used—77% ! 41–50 times—1.4% ! 91–100 times—1.4% ! 100 + times—1.4% ! Too many times to count—4.7%	N/A	N/A	N/A

Age at first use (of those reporting use of substance)	N/A	N/A	N/A	N/A	! <12 y.o.—4.0% ! 13–17 y.o.—80% ! 18–24 y.o.—12.0% Average Age: 15.8 Median Age: 16	N/A	N/A	N/A
Got High from Metamphetamines								
Last 30 days	N/A	N/A	N/A	N/A	! no use—91% ! 1–5 times—1.4%	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	! never high—77% ! 1–10 times—6.1% ! 31–40 times—0.7% ! 41–50 times—0.7% ! 71–80 times—0.7% ! 91–100 times—0.7% ! 100 + times—2.0% ! Too many times to count—4.1%	N/A	N/A	N/A
Inhalants								
Used Inhalants								
Last 30 days	N/A	N/A	N/A	! Used at least once—0.2%	! no use—89% ! 1–5 times—1.4% ! 6–10 times—0.7%	N/A	N/A	N/A
Lifetime	N/A	N/A	! Used at least once—13.6%	! Used at least once—0.9%	! never used—81% ! 1–10 times—8.1% ! 81–90 times—0.7% ! Too many to count—1.4%	N/A	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	! <12 y.o.—22% ! 13–17 y.o.—46% ! 18–20 y.o.—28% Average Age: 16	N/A	! <12 y.o.—53% ! 13–17 y.o.—41.2% Average Age: 12.6 Median Age: 12	N/A	N/A	N/A

(*Continued*)

Table 12.2. (*Cont.*)

Prevalence Rates	Aboriginal Australia	American Samoa	FS of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Got High from Inhalants								
Last 30 days	N/A	N/A	N/A	N/A	! none—89% ! 1–5 times—1.4% ! 6–10 times—0.7%	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	! never high—77% ! 1–10 times—6.1% ! 31–40 times—0.7% ! 41–50 times—0.7% ! 71–80 times—0.7% ! 91–100 times—0.7% ! 100 + times—2.0% ! Too many times to count—4.1%	N/A	N/A	N/A
Other Substances								
Betel Nut								
Last 30 days	N/A	N/A	! no nuts/day—9.8% ! 1–5 nuts/day—45% ! 6–10 nuts/day—23% ! 11–20 nuts/day—14% ! 26–30 nuts/day—4.9% ! 31–40 nuts/day—1.9%	! Avg times of use—0.3%	! Any Use—7.4%	N/A	N/A	N/A

			! 50–60 nuts/day—1.5% ! 65–70 nuts/day—0.4% ! 100 + nuts/day—0.4%					
Lifetime	N/A	N/A		! Any Use—7%	! Any Use—7.4%	N/A	N/A	N/A
Age at first use (of those reporting use of subs	N/A	N/A	! <12 y.o.—20% ! 13–17 y.o.—50% ! 18–21 y.o.—28% ! 22–27 y.o.—2% Average Age: 15.2	N/A	Average Age: 11	N/A	N/A	N/A
Kava								
Last 30 days	N/A	N/A	N/A	! Avg # of sessions—2	N/A	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	! Used at least once—59%	N/A	N/A	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tuba (fermented coconut milk)								
Last 30 days	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	! Any Use—2.0%	N/A	N/A	N/A
Age at first use (of those reporting use of substance)	N/A	N/A	N/A		Average Age: 13.6	N/A	N/A	N/A

(*Continued*)

Table 12.2. (*Cont.*)

Prevalence Rates	Aboriginal Australia	American Samoa	FS of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Suicide								
Suicide Intent and/or Ideation								
Last 30 days	N/A	N/A	! 1–5 times—23% ! 6–10 times—0.5% ! 11–15 times—0.8% ! 16–20 times—0.2% ! 21 + times– 0.2%	! Avg # of times—0.4	! Thought about suicide at least once—19%	N/A	N/A	N/A
Last 12 months	N/A	N/A	! 1–5 times—31.6% ! 6–10 times—1.6% ! 11–15 times—0.8% ! 16–20 times– 0.2% ! 21 + times—2.7%	! Avg # of times—0.6	! Thought about suicide at least once—38%	N/A	N/A	N/A
Suicide Attempts								
Last 30 Days	N/A	N/A	! 1–5 times—23.9% ! 6–10 times—1.08% ! 11–15 times—0.2% ! 16–20 times—0.2% ! 21 + times—2.5%	! Avg # of attempts—0.1	N/A	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	! Attempted suicide at least once—24%	N/A	N/A	N/A
Reasons given for suicide attempts	N/A	N/A	N/A	N/A	! Depressed ! Social problems ! Family difficulties ! Lack of social power	N/A	N/A	N/A

Violence								
Witnessed Violence								
Last 30 days	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	N/A	N/A	! At least once—65%	N/A	N/A
Victims of Violence								
Last 30 days	N/A	N/A	! Victimized—34%	! Victimized —16%	! Victimized—12%	N/A	N/A	N/A
Perpetrators over last 30 days	N/A	N/A	! Relatives and strangers	N/A	! Most often—strangers ! Second most often—relatives ! Third most often—parents	N/A	N/A	N/A
Lifetime	N/A	N/A	! Victimized —50.8%	! Victimized —34%	! Victimized—29.1%	! At least once—34%	N/A	N/A
Perpetrators in lifetime	N/A	N/A	N/A	N/A	! Most often—parents ! Second most often—strangers ! Third most often—relatives ! Fourth most often–boy/girlfriend ! Fifth most often—classmates	! Strangers, parents, spouses, family members, friends	N/A	N/A

(*Continued*)

Table 12.2. (*Cont.*)

Prevalence Rates	Aboriginal Australia	American Samoa	FS of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Committed Violence Against Others								
Last 30 days	N/A	N/A	! No times in fight—73% ! 1–5 fights—22% ! 6–10 fights—2.1% ! 11 + fights—2.7%	! Committed Violence—19%	! Committed Violence—16.2%	N/A	N/A	N/A
Victims over last 30 days	N/A	N/A	! Close companions, friends, and relatives	N/A	! Most often—relatives (non-parent or non-sibling) ! Second most often—strangers ! Third most often–friends ! Fourth most often—parents	N/A	N/A	N/A
Lifetime	N/A	N/A	N/A	! Committed Violence—30%	! Committed Violence—39%	! At least once—23%	N/A	N/A
Victims in lifetime	N/A	N/A	N/A	N/A	! Most often—strangers ! Second most often—boy/girlfriend ! Third most often—parents	! Strangers, friends, family, spouse, children	N/A	N/A

in FSM and Guam report early age of first use for alcohol, tobacco, and marijuana. This fact suggests that prevention efforts must be directed toward younger age groups. The early age of onset use leads to difficulties in intervention and prevention during teen years. Habits formed early are difficult to break. Results from other sites were not available.

Suicide ideation and attempt percentages for the past thirty days and for the past year was also very high in FSM (25% for past 30 days/36% for past year for ideation; and 27% for attempts in last 30 days) and Guam (19% for past 30 days/38% for past year in ideation; 24% attempted at least once in lifetime). Both of these sites have long had serious problems with youth suicide and efforts need to be made to introduce intervention and prevention efforts at ideation stages rather than waiting for actual attempts to occur. Suicide ideation can quickly escalate into preliminary attempts and then more serious efforts. There is every reason to believe that as traditional cultures experience disintegration, suicide will emerge as a larger social problem because of the absence of social glue and anchors for young people.

In the FSM, 34% reported being victims of violence at least once in last 30 days, and 51% reported being victims in their lifetime. Relatives and strangers were the sources of the violence. In Guam, 12% reported being victims of violence in the past 30 days and 29% percent in their lifetime. Strangers and relatives are the primary perpetrators. Fiji and Hawaii report lifetime victimization rates of 34%. With regard to committing violence for the past 30 days, FSM reported rates of 25%, Fiji 19%, and Guam 16%. Violence is obviously commonplace in all settings and represents the breakdown in societal control of violent impulses. IN the face of frustration and affront, violence emerges as an acceptable response for resolving personal tensions and conflicts. It is used by the entire age spectrum from young to old. As violence becomes ensconced as a way for dealing with problems, it becomes institutionalized in families, schools, and the media. Programs must be developed that recognize violence as a breakdown in the social fabric of a society. While controlled and symbolic violence in sports and media is a problem, the more serious challenge is rendering violence as unacceptable for resolving frustrations and conflicts in all settings. Programs that seek to reduce violence toward children and women would be particularly welcome.

Overview of Some Key Results

Table 12.3 provides an overview of key points and conclusions from the presentations at the conference. As Table 12.3 indicates, alcohol use varied across sites, but in all instances it constitutes a serious societal problem

Table 12.3. Tabular Summary of Key Points and Conclusions by Site

	Aboriginal Australia	American Samoa	Federated States of Micronesia	Fiji	Guam	Hawai'i	Marshall Islands	Solomon Islands
Alcohol	! Misuse of alcohol began with exposure to Western drinking styles ! Indigenous people have higher rates of alcohol attributable deaths compared to the remainder of the Northern Territories population. ! Indigenous high risk drinkers, compared to their low risk counterparts, were more likely to have left the educational system before 15 years of age, be unemployed, receive support through government pensions, earn an annual income of less than $10,00, come from a non-English speaking household		! Most respondents preferred beer, followed by hard liquor, wine, fermented yeast, and tuba (or faluba). ! Those who drank reported liking the taste and that it left a strong effect. σ At least 70% experienced parental discouragement from drinking. σ Most frequent reasons for drinking were to socialize, to relax, had no other activities to do, being angry, and receiving bad news.	! Respondents not overly concerned about alcohol use. ! Verbal responses suggested higher usage of alcohol than reported on survey.	! Drinking age in Guam is 18, and alcohol is easily available at parties and weekend fiestas ! Almost 60% reported that alcohol does not cause problems.	! Non-drinkers were more likely to be older, belong to a church, report being happier, and have greater Hawaiian blood quantum. ! Individuals who were younger at first use of alcohol were more likely to have more episodes of being drunk within a lifetime and in the last 30 days, binge drinking, and consumption of alcohol. ! Younger age for first use of alcohol was related to higher rates of alcohol related problems throughout life.		! For possible social or cultural reasons, alcohol is not classified as a drug. ! Home-brewed products, including kwaso, toddy, and methylated spirits, are popular among low-income communities. ! Intoxication by home-brewed products have been related to episodes of violent behavior towards the self and others. ! There appears to be a competitive nature in the consumption of drugs and alcohol among youth, such as seeing who can consume the most of a substance before losing consciousness. ! Alcohol consumption is a social event, with groups, and often occur in beach or

	! Per capita consumption among Indigenous drinkers has been found to be 1.97 times higher than the national average.				! Men had more episodes of being drunk and consumed more alcohol than women.	bush areas that provide as sense of freedom from social restrictions and high prices of clubs or bars. ! Drinking is often a demonstration of one's toughness. ! Drinking often occurs when wages are received, and often result in the inability to pay for food or schooling for the family.
Tobacco	! Smoking-related deaths are 7 times higher among Indigenous women and 3 times higher in Indigenous males compared to non-Indigenous counterparts. ! Indigenous males were 2 times more likely to be admitted to the hospital and Indigenous females were 3 times more likely to be admitted for smoking-related illnesses compared to nonindigeno. counterparts.	! Majority of respondents reported having strong parental support against smoking. Parental supported was rated as most helpful towards smoking cessation. ! Antismoking products were rated least helpful in helping to stop smoking.	! Mean age for first use of tobacco use similar to general rates reported for chronic smokers (16 years of age).	! Teens become smoking at an earlier age than they begin drinking, suggesting the need for prevention programs to target younger teens and adolescents. ! Smokeless tobacco does not appear to be a problem for Guam sample.	! The more cigarettes smoked per day, the lower ratings of health and happiness that were reported.	! Smoking is generally a social act. ! Some churches, such as the Seventh Day Adventists, ban smoking, although the discouragement has been less effective on youths. ! Tobacco companies have launched aggressive advertising campaigns to encourage smoking.

even if it serves the function of a social lubricant and is considered to not be a problem in some sites. The youth drink for social reasons, but also to show "toughness" and in response to boredom and anger. There is a lot of peer pressure to drink and in the collective social orientations that dominate the Pacific Island cultures, peer pressure is very difficult to resist without consequences for acceptance. "Just say no" is easier in settings where group membership may not be as critical for identity and for social life.

Tobacco use in the region will always be a serious health problem since it starts at young ages and evolves into strong levels of social facilitation. Crystal methamphetamine was a serious problem only in Hawaii during the date collection phase; however, it is now growing in other sites and it has the potential to become a problem through personal contacts with people in Hawaii. Hawaii is known as the "ice" capitol of the world and from Hawaii, many mainland United States communities have become problematic. Kava use was very high in Fiji and among the Australian aboriginal respondents. Use in Australia was reported to be 76 times higher than the acceptable dosage level for treatment of anxiety. Current research suggests that excessive Kava use may be associated with liver damage. While this was not explored, it does constitute an important area for future study because commercial Kava is now widely available and is being promoted through health and nutrition stores across the Pacific. Betel nut was reported to be widely used only in the Solomon Islands where it is even given to toddlers.

Methodology Challenges

One of the major lessons learned from this process of developing an instrument and applying it to countries that differ widely in terms of languages spoken, political structure, and cultural view of research, is that the process itself must proceed with the same sensitivity to culture that is found in the instrument and methodology for which it was developed. Although the participants developed shared measurement strategies, it was recognized that each team would need to adapt the instrument, adding components and translating as necessary for its distinct situation.

Examples of the various methodological challenges and their subsequent solutions appear throughout this book. In the Northern Territories of Australia, for example, we see that the tribal social structure, suspicions of outside researchers, and tremendous variability in dialects and languages spoken within a relatively small area made gathering epidemiological data nearly impossible. In the Solomon Islands, the problem of alcohol use is so

widespread that the questions we were asking (e.g. "How many times have you consumed alcohol in the last 30 days?") could not capture the nature of their drinking behavior which typically involved drinking for several days without stopping. In American Samoa, the topic of violence proved very difficult to ask about given cultural beliefs about family privacy. Similarly, the strong Christian beliefs of the American Samoan population made queries about suicide very difficult. The people interviewed were very reluctant to talk about the topic and some found it a rude intrusion into their privacy.

The team from the FSM presented an even more fundamental problem. They reported that many people living within their country do not keep track of their age. The researchers from the team reported that in such instances, the closest available estimates of age had to do with approximation based on being born before or after an important event in their village. They had to make important research decisions about whether to only survey those individuals capable of reporting on their own age or adapting the instrument to be applicable to those unable to do so.

Open-ended response format was determined to be the least culturally biased response format as it did not convey specific norms. For example, while a question from the original National Household survey had "five or more" as the highest category for number of alcoholic beverages consumed during a single occasion, it was believed that this format would both result in underestimations of the total amount of alcohol consumed and in conveying that anyone who drinks more than 5 beverages is abnormal. At the same time, this open-ended format was problematic for some responders. For example, rather than writing in an actual number, several Native Hawaiian responders wrote "too many to count" or "a lot" for lifetime instances of alcohol use. Anchors that made calculations simpler may have helped (e.g. "About 3 times per week").

SOME IMPORTANT ISSUES

Communication of Findings

Each team of researchers in the present volume approached the task with a diverse set of strengths and needs identified for their respective nations, focusing specifically on selected project goals for special emphasis in their country. For example, the team from Guam made it a central goal to develop means of disseminating their findings to the population at large. They produced a series of articles in local newspapers to increase public awareness of alcohol, drug use, and violence in their communities. In

this way, the team from Guam led the way in making research accessible to citizens and policy makers in their country. Similarly, the team from the Republic of the Marshall Islands created a formal report that was presented to their country's government. This was an important first step toward establishing a sustainable information database and tracking system for health indicators. However, each site was faced with the special challenge of sharing the information with political and policy leaders and establishing a working relationship. This will not be easy in some of the locations where decisions are made by established groups and efforts to share data and opinions may not be welcome. Change is not easy!

Capacity Building

In the Federated States of Micronesia, an important team goal was capacity building and mentorship. Their work in training undergraduates to conduct all aspects of research was useful both in the immediate sense as this project was successfully completed and in the long term as these undergraduate research assistants are now able to participate future research projects with the team and can initiate and conduct research of their own. In a nation like the FSM, having an ever-increasing group of capable researchers is especially important given the wide expanse of ocean dividing the country and its resources. But, the issue of capacity building is a serious one for all the sites. Developing human resources is a complex problem that involves funding, training, leadership, and complex cultural issues about who makes decisions and how they are made. Although educated professionals are needed, their availability does not guarantee access to the system nor the power to make changes.

Social Policy and Decision Making

Many of the important policy decisions made regarding health programs in the Pacific Island and Oceanic region lack the data necessary to make informed policy decisions about budget making and resource allocation. Capital resources, personnel, and technical knowledge must all be distributed based upon the needs of a particular community. Without accurate data on the extent of problems and the types of prevention and intervention programs that can be successful in solving those problems, policy makers are often left with the difficult task of distributing resources in response to an unknown need. The data collected during this project is an example of the type of information that can be extremely useful to countries seeking to improve their health care systems.

Building Connections and Regional Thinking

As individuals interested in the well being of Pacific peoples, this group recognized their shared history of colonization and westernization and subsequent rapid social change, and their shared status as island nations with low populations existing within beautiful yet vulnerable ecosystems. Lastly, they recognized that their shared wealth of indigenous cultural knowledge, values, and social structure that can be used to mobilize response to current social problems. By thinking of the Pacific Islands nations as a single Pacific Ocean Continent, even amidst their many variations, it will be possible to concurrently and collaboratively generate social and economic solutions and policies that reflect an understanding of our unique cultural presence in this rapidly changing world.

FUTURE DIRECTIONS IN RESEARCH

Indigenous Views

Future research in this area must focus on finding Pacific and Oceanic solutions that incorporate indigenous philosophies, conceptions of illness and well being, and healing practices. Sensitivity to this approach will enhance the quality of data we collected and in terms of the quality of the findings and the development of a collaborative network. The sustainability of a research network is necessary because of the common problems in the Pacific and Oceanic region. In addition, a shared commitment to the integrity of the collaborative research process will encourage indigenous perspectives that are not only welcomed, but viewed as fundamental and essential to any efforts.

Research that focuses on developing culturally appropriate intervention and prevention models are needed urgently in the Pacific Islands and Oceanic areas. The research would benefit from utilizing a systems approach that considers the individual within the larger familial, social, and cultural contexts. This approach is not only more relevant for Pacific Island and Oceanic people, but more accurately reflects the actual ecology of life activity for virtually all cultures. This approach would also open up opportunities for a broader range of interventions and prevention efforts since these could be implemented at the most available level of analysis.

The Challenges Facing Women

There is a need for future research to focus on the problems of substance abuse, alcohol, violence, and suicide in women. Research models

and methods should try to be more gender specific. For some of the sites, the mental health of women constitutes a serious problem. This is especially true with regard to violence and sexual abuse. For many women who are victims of violence and abuse, traditions continue to silence their voice. They are expected to endure in the face of adversity. This view constitutes a serious challenge for every nation discussed.

Role of Religions

Formal religions represent an important source of both social change and social support for many Pacific Island nations and cultures. There can be no doubt that religions can provide a source of strength and coping with the challenges the region is facing. But, it is also clear that religions represents a challenge to traditional cultures. Throughout history, missionary intrusion often has been associated with cultural abuse and cultural disintegration. Mormons, Seventh Day Adventists, and Catholic missionaries abound in the region and are having much success at conversion. Yet, the usual question remains about the consequences of missionary intrusion. The history of Hawaii is replete with examples of the destructive cultural consequences of missionary conversion. The task of negotiating the well-intentioned impulse for religious missions with the preservation of traditional cultures is difficult. The topic must be elevated to a position of open discussion and debate for the people of the Pacific.

A Closing Thought on Challenges to the Pacific Island Region

Although the distances that separate the Pacific Island, oceanic, and rim nations are enormous, there is a commonality among them that needs to be acknowledged and responded to by the United States, other developed countries, and various organizations. They are emerging nations, but they have histories and well-developed cultural traditions that extend back thousands of years. The contrast between Western standards of economic and political development and the actual historical and cultural realities of the region constitutes a major communication gap that is breeding many ill feelings and frustrations. Western popular culture has seduced entire generations of youth creating generation gaps and cultural conflicts that have had far reaching implications for individual and societal health and well being. The response from the global community (e.g., United States, United Nations, World Bank) has failed to recognize the complex interdependency of the regional problems it has created and continues to foster. The response from the global community must change and must extend beyond individual nations to the entire region. The vast distances should

not be permitted to mask the shared histories and mutual challenges of the region. The response must be local, regional, and international!

REFERENCES

Lambo, A. (2000). Constraints on world medical and health progress. In M. Lanza (Ed.) ***One World: The health and survival of the human species in the 21st century.*** Santa Fe, NM: Health Press.

Marsella, A. (1997). ***Native Hawaiian identity and acculturation.*** Union of Polynesian Nations Conference. East-West Center, Honolulu, Hawaii, February 15, 1997.

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