2008

Substance Use and Barriers to Treatment Across Native Hawaiians/Pacific Islanders and Asian Americans

Lauren Michelle Levine
University of North Florida

SUBSTANCE USE AND BARRIERS TO TREATMENT ACROSS NATIVE HAWAIIANS/PACIFIC ISLANDERS AND ASIAN AMERICANS

by

Lauren Michelle Levine

A thesis submitted to the Department of Psychology
in partial fulfillment of the requirements for the degree of

Master of Arts in Counseling Psychology

UNIVERSITY OF NORTH FLORIDA

COLLEGE OF ARTS AND SCIENCES

May, 2008

Certificate of Approval

The thesis of Lauren Michelle Levine is approved: Date:

Signature Deleted

4/17/08

Committee Chairperson

Signature Deleted

April 16, 2008

Accepted for the Department of Psychology:

Signature Deleted

4/21/08

Accepted for the College of Arts and Sciences:

Signature Deleted

4-22-08

Accepted for the University:

Signature Deleted

1 MAY 2008

TABLE OF CONTENTS

LIST OF TABLES....iv

ABSTRACT....v

INTRODUCTION....1

Substance Abuse among Asian Americans....2

Substance Abuse among Native Hawaiians/Pacific Islanders....3

Possible Mechanisms for Disparities in Substance Use across Asian Americans and Native Hawaiians/Pacific Islanders....6

Treatment Utilization and Barriers to Treatment....8

Limitations of Previous Research and Current Study....10

Hypothesis....10

METHOD....11

Sample....11

Ethnicity....11

Substance Use....12

Barriers to Substance Abuse Treatment....12

Data Analysis....12

RESULTS....13

DISCUSSION....17

REFERENCES....26

VITA....29

LIST OF TABLES

TABLE PAGE

1. 14

2. 14

3. 14

4. 15

Abstract

Research shows that Asian Americans have lower rates of substance abuse treatment utilization than Caucasians. However, investigators have recently begun to separate Native Hawaiians/Pacific Islanders (NH/PI) from Asian Americans. Thus, it remains unclear whether disparities in barriers to treatment utilization differ across NH/PIs and Asian Americans. Data ($N = 43,093$) from the 2001-2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a large, nationally representative survey was used in this study. A chi-square analysis examined whether disparities in barriers and utilization differed between NH/PIs ($n = 300$) and Asian Americans ($n = 1,334$). We found that NH/PIs who thought they should seek treatment for their drinking were statistically and significantly less likely than Asian Americans to do so. We found no statistically significant differences for drug use. We also found that NH/PIs were more likely to meet criteria for a substance use disorder than Asian Americans. Results suggest the possibility that alcohol use has become increasingly embedded and normalized in NH/PI culture as opposed to Asian American culture while drug use has not. Thus, alcohol's normalization may result in NH/PIs more frequently failing to seek needed alcohol treatment. This indicates that public health policy should consider alcohol and drug use separately when designing and implementing culturally-specific preventions and interventions and focus on the de-normalization of alcohol use. Large-scale surveys of NH/PIs are needed to better identify barriers to treatment and utilization patterns. In sum, results highlight the need to increasingly consider cross-cultural variation in research while simultaneously developing culturally sensitive prevention and intervention programs.

Substance Use and Barriers to Treatment across Native Hawaiians/Pacific Islanders and Asian Americans

Why does psychological science so often ignore ethnic diversity? Research with Native Hawaiians and Pacific Islanders (NH/PIs) frequently combines the population with Asian Americans to form a homogenous ethnic group (Garland et al., 2005; Ja & Aoki, 1993; Price, Risk, Wong & Klingle, 2002; Sakai, Ho, Shore, Risk & Price, 2005; Sharma, 2004). This practice often elicits a type of ethnic gloss that fails to examine cultural differences between Asian Americans and Native Hawaiians/Pacific Islanders. Federal funding and grants are being awarded to the NH/PI population at increasing rates. Research shows that substance use among NH/PI samples tends to be higher than other groups traditionally falling into the Asian category (Andrade et al., 2006; Wong et al., 2004). Substance abuse treatment utilization has been found to be low among the NH/PI population (Sakai et al., 2005). Few studies have collected information regarding the low treatment utilization rates, and what the barriers to receiving treatment are for Pacific Islanders. The present study seeks to understand which barriers to substance abuse treatment are endorsed by the NH/PI sample, and if differences in barriers occur between this population and those who identify themselves as Asian American.

Beginning in the year 2000, *Native Hawaiian or Other Pacific Islander* was created as a separate category from *Asian* on the U.S Census as one of the five standard Office of Management and Budget race categories (Grieco, 2001). Between the 1990 and 2000 Census, the Pacific Islander population increased. Previously, data was not collected separately, limiting research with Pacific Islanders. Knowledge of the make-up of Asian and NH/PI groups is essential for understanding cross-cultural research. The

census uses the term *Asian* to refer to "people having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent" (Barnes & Bennett, 2002, p. 1). An estimated 14.4 million Americans reported their ethnicity as Asian alone or Asian in combination with another race in the year 2005, with increasing growth. (U.S. Census Bureau, 2007).

NH/PI refers to "anyone having origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands (Grieco, 2001, p. 1). The population was estimated at 990,000 in 2005 (U.S. Census Bureau, 2007). The U.S. Census recognizes 23 detailed groups organized into three major island groups: *Polynesian, Micronesian*, and *Melanesian* (see Grieco, 2001 for a complete description). The largest NH/PI subgroup in Census 2000 was Native Hawaiian, alone or in any combination, with about 401,162 individuals (Grieco, 2001). Nearly three-fourths of the NH/PI population lived in Western states, with over half of the population residing in Hawaii and California (Grieco, 2001). These facts are key components to advocating funding and programming for this population.

Substance Abuse among Asian Americans

Previously, NH/PI samples were included with Asians in substance abuse research. Therefore, having an understanding of the literature on Asian American samples is essential. Asians are long considered to have the lowest rates of substance use among all ethnic groups in the U.S., although this may not be entirely valid since many studies use samples with small representations of Asians (Wong et al., 2004). The "model minority" stereotype often contributes to perceptions that substance abuse and mental health are not problematic within the community. This may be a result of Asians

underreporting mental health problems. The 2000-2002 National Household Survey on Drug Abuse found Asian Americans were more likely than Caucasians to abstain from alcohol and drug use. However, non-abstaining Asians were found to have similar rates of past-year drug and alcohol dependence to Caucasians (Sakai et al., 2005). An analysis of the Native Hawaiian/Pacific Islander sample was too limited in size to include in this study.

In an analysis of four national epidemiological studies on substance use, Price et al. (2002) found evidence of substance use and disparities in use between Asian subgroups; however separate results for NH/PI individuals were not included. In another study, Lee, Law and Eo (2003) emphasize that ethnicity can be significantly associated with prevalence of drinking. Tracking substance use among Asian American youth can be fundamental to having an understanding of current use patterns. The exposure of Asian adolescents to American popular culture contributes to a higher risk of developing drug problems (James, Kim & Moore, 1997). Asian American youth have been found to become involved in the club drug scene (Hunt, Evans, Wu & Reyes, 2005). Although taking into account the utilization of a population with high drug use potential, the majority of the respondents had used five or more illicit drugs in their lifetime, suggesting the presence of substance use among some Asian American youth. These findings are key in understanding NH/PI substance use since the community is often included in these studies.

Substance Abuse among Native Hawaiians/Pacific Islanders

Fewer studies on substance abuse look at ethnic groups that include NH/PI as a separate sample from Asians. Research separating the groups has found rates of

substance abuse among NH/PI samples to be higher than Asian samples. Wong et al. (2004) found a Pacific Islander sample to have rates of drug and alcohol use similar to or higher than reported by the White sample, and higher rates of alcohol and drug use than all other Asian ethnic group samples. Andrade and colleagues (2006) found adolescents with indigenous Hawaiian ancestry had higher rates of selected substance use disorders, including a diagnosis of dependency, than their non-Hawaiian counterparts living in Hawaii. When the indigenous Hawaiian sample was compared with other community samples (including military youths, community youths and high school students), the Hawaiian adolescents were found to have higher rates of substance disorders than all other samples, with the exception of Native American youths, illustrating risk for Hawaiian youth.

The introduction of methamphetamine in Hawaii during the 1980s has had a devastating impact on NH/PI health, as it was linked with addiction, child abuse and domestic violence (Freese, Obert, Dickow, Cohen & Lord., 2000). It was reported that approximately three-quarters of Hawaiian methamphetamine users were of Asian/Pacific Islander descent, an alarming statistic to the Hawaiian community (Freese et al., 2000). By the 1990s, treatment centers were reporting that crystal methamphetamine was the primary drug of abuse for 38% of treatment entry. These issues have not entirely gone unnoticed by the community; a 1998 project assessing Hawaiians' perception of drug abuse in Hawaii found that 71% of those surveyed thought that substance abuse was highly prevalent; with the majority believing the problem was worsening (Waitzfelder, Engle & Gilbert, 1998).

Much of the research involving Pacific Islanders focuses on Native Hawaiians. Although limited, there has been some in-depth research with other Pacific Island nations to better understand cultural consumption patterns. Research at the University of Guam has found that ethnic Micronesians reported greater alcohol consumption than non-Micronesians (Saleh, 1994). Research with other Pacific Islands continues to find evidence of increasing substance abuse and a lack of treatment availability. Information collected from the Cook Islands, Fiji, Kiribati, Samoa, the Solomon Islands and Tonga led the authors to conclude that "alcohol use is now deeply embedded in the patterns of contemporary social and economic life in the South Pacific and this is unlikely to change" (McDonald, Elvy & Mielke, 1997, p. 389). At the time of the study, there were limited facilities available for those experiencing alcohol related problems (McDonald et al., 1997).

Research on adolescent health status on Vanuatu, Tonga and Pohnpei suggests a link between economic development and health behavior; more economically developed islands, such as Tonga and Pohnpei, with more access to Western culture and pressure to acculturate, have increased rates of substance abuse (Phongsavan et al., 2005). Devaney, Reid, Baldwin, Crofts and Power (2006) report that most areas of the Pacific do not address drug users in programs or interventions and that there is a lack of research and treatment in the Pacific Islands, most likely due to the low numbers of NH/PI and geographic isolation. Current evidence of substance abuse problems, along with the lack of past research, highlights the need to understand treatment barriers for Asians and Pacific Islanders.

Possible Mechanisms for Disparities in Substance Use across Asian Americans and Native Hawaiians/Pacific Islanders

Published literature gives evidence of a growing substance abuse problem among NH/PIs (McDonald et al., 1997; Phongsavan et al., 2005) at higher rates than Asian Americans (Andrade et al., 2006; Wong et al., 2004). Hypotheses include cultural loss and trauma, physiological make-up and mixed heritage Pacific Islanders.

Community members in Hawaii cite alienation and oppression as two of the factors that may explain high rates of alcohol abuse, in that the alcohol can be seen as a coping mechanism (Waitzfelder et al., 1998) The forced imposition of Western law in the Hawaiian Islands brought about a deterioration of the native *kapu* system, leaving post-contact Hawaii in a struggle to retain the values and practices that once dominated the islands. Prior to western contact, alcohol was unknown to Hawaii and other Pacific Islands and its unregulated introduction further damaged the traditional ways of the Hawaiian kingdom (Peter & Samo, 2005). Kava, or *'awa*, was commonly used among the islanders for ceremonial purposes and was regulated by a strong system of beliefs associated with the traditional status hierarchies of Hawaiian society (Brown, 2003; Keaulana & Whitney, 1990) and was de-regulated with colonization. Similar to Native Americans, Hawaiians and Pacific Islanders endured the loss of their land and people, leading to the disintegration of social, cultural and healing systems (Andrade et al., 2006).

Although many countries in Asia have also encountered colonization and value system challenges, the ancient ways of life and the possession of land among the people are still evident. In many Pacific Islands, including Hawaii, ancient culture and land

possession by the original people have near disappeared. The anxiety-buffer hypothesis (Salzman, 2005) involves the idea that culture serves as a psychological defense, and that if that defense is disrupted, anxiety is produced. Without a cultural anxiety-buffer, attempts to manage anxiety and loss of culture may lead to maladaptive behaviors, such as substance use. When grief over cultural loss is unresolved, multi-generational transmission of trauma occurs (Salzman, 2005). Although not specific to NH/PI populations, this theory offers an explanation of increased substance use as a coping mechanism for the loss of NH/PI culture on many of the islands.

Physiological make-up of some Asian groups may also contribute to differences in alcohol use. It has been found that the alleles ALDH2*2 and ADH1B*2 may increase levels of acetaldehyde during the metabolism of alcohol, and that these alleles occur in certain Asian ethnic groups. Certain reactions to moderate amounts of alcohol in Asian Americans include vomiting, facial flushing, and increased pulse rate (Cook, Luczak & Shea, 2005). The presence of these alleles may serve as protective factors in the incidences of binge drinking among Asian Americans (Luczak, Shea, Hseuh, Chang, Carr & Wall, 2005). The alleles have been found in Northeastern Asian groups such as Chinese, Japanese and Korean (Luczak et al., 2005; Wall et al., 2000), but have not been examined extensively in Native Hawaiian or Pacific Islander groups. It is possible the absence of the allele may affect rates of alcohol use among Pacific Islanders. Although not addressed in the present study, this could warrant further research in the area.

Having multiple ethnic identities can also influence substance use. It has been found that mixed-heritage Asian Americans had a higher risk of substance use than non-mixed heritage Asians (Price et al, 2002). According to the Census 2000, over half of

those identifying as NH/PI also identified membership in another race, meaning that more NH/PIs report this than NH/PI alone (Grieco, 2001). Only 14% of Asians reported their ethnicity in combination with another race (Barnes & Bennett, 2002). Those that belong to multiple ethnic groups may experience rejection from any or all of those groups, bringing about a confusion of cultural identity. Adolescents belonging to more than one race have been found to have higher rates of drug use than any other single racial group (Wu, Schlenger & Galvin, 2006). Due to colonization and emigration to the Pacific Islands, children with mixed heritages make this issue increasingly pivotal.

Treatment Utilization and Barriers to Treatment

Limited research has focused on treatment utilization of NH/PIs and Asian Americans as a separate group. When studied homogeneously, Asian Americans have lower rates of mental health treatment utilization than Caucasian Americans (Sakai et al., 2005; Sue & McKinney, 1975; Zane & Kim, 1994), and also Latino and African American samples (Garland et al., 2005). When Asians do present for mental health treatment, their symptoms tend to be more severe than those of other clients (Uba, 1994). In terms of substances, Asian Americans have a lower rate of utilization than Caucasians, who have been found to have rates of past-year treatment that was more than double the Asian American sample (Sakai et al., 2005). In a sample of Hawaiian adolescents, a higher percentage of Native Hawaiians indicated a need for substance abuse treatment than the other ethnic groups (including Chinese, Filipino, Japanese and White), reinforcing the need to address this group as a separate entity (Wong et al., 2004).

A greater understanding of barriers discouraging Asian Americans and Pacific Islanders from seeking services will allow for better ways of combating the problem. Uba

(1994) cites six barriers to the use of mental health services, including stigma, suspiciousness, lack of knowledge regarding available services, lack of financial resources, geographic inaccessibility and shortages of culturally sensitive personnel. Barriers to seeking and/or receiving treatment can be considered by two constructs: psychological and institutional.

Psychological barriers are typically reinforced by culture. Fear of shame may be highly influential in preventing an Asian American from disclosing a problem, especially when a perceived negative social response toward the individual or family may occur (Zhang, Snowden & Sue, 1998). It has been found that more Asian Americans disclose mental health problems to a friend or relative before seeking formal treatment, although results for Asian Americans and Pacific Islanders were combined (Zhang et al., 1998). Substance abuse in particular is considered a taboo issue in many Asian American communities and not easily discussed (Ja & Aoki, 1993). Institutional barriers for Asian Americans can include a lack of culturally specific treatment, language barriers and a scarcity of resources. More established groups may have greater access to health care as compared to newly emerging immigrant groups such as Vietnamese, Cambodians and Pacific Islanders (Ja & Aoki, 1993).

Native Hawaiians have traditionally used non-western, family-based healing methods such as *ho`oponopono*, a cultural process for maintaining harmonious relationships among families through structured discussion of conflicts (Hurdle, 2004). Although this process all but disappeared with the colonization of Hawaii, it has recently been reincorporated into Hawaiian healing in attempts to retain ancient customs while treating community problems to alleviate psychological barriers. However, some

Hawaiians report reluctance from the community to acknowledge the severity of the substance abuse problem, therefore preventing efforts at combating the problem (Waitzfelder et al., 1998). Institutional barriers have been indicated by community members in Hawaii, such as a lack of appropriate services for detoxification and aftercare, limited residential treatment, unstable funding and lack of insurance reimbursement (Waitzfelder et al., 1998).

Limitations of Previous Research and Current Study

The purpose of the current study is to identify differences in barriers to substance abuse treatment for NH/PI individuals in comparison to Asian Americans. Previous research has been incomplete in this capacity, mainly due to the lack of separation between the groups and limited large-scale sampling of NH/PI individuals, especially assessing substance use. The current data set utilizes a self-report method for all information, including barriers, to allow for individual perspectives and experience. In the past, many attempts to gather information on barriers to treatment have focused on collecting information from systems and institutions.

The comprehensiveness of questionnaire, self-report method and ability to specifically gather information about the NH/PI population are expected to illustrate the community members' experiences with barriers to substance abuse treatment.

Hypothesis:

It is expected that due to the cultural differences between Asian Americans and Native Hawaiian/Pacific Islanders, barriers to substance abuse treatment will differ across the two groups. Given the lack of previous research examining this topic, projected differences are unclear.

Method

Sample

The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) was designed as a longitudinal study with the first wave of data collected in 2001-2002. The U.S. Bureau of the Census conducted the field work for the survey via computer assisted personal interviewing (N=43,093). The target population of the NESARC is the civilian noninstitutionalized population, 18 years and older, residing in the United States and the District of Columbia (including Alaska and Hawaii). This includes persons living in households and the following group quarters: boarding houses, rooming houses, nontransient hotels and motels, shelters, facilities for housing workers, college quarters and group homes (see Grant et al., 2003 for a comprehensive description of sampling procedures).

Ethnicity

A single item allowed Hispanic self-identification. Participants identified their ethnicity as one or more of four categories: *American Indian or Alaska Native*, *Asian*, *Black or African American*, and *Native Hawaiian or Other Pacific Islander*. For the present study, those who identified an ethnicity item as *Asian* or *Native Hawaiian or Other Pacific Islander* were included. Of the total sample (N = 43,093), 1,334 individuals reported Asian ethnicity, with the largest number of individuals reporting Chinese origin (n = 287), followed by Indian, Afghanistani, Pakistani (n = 186), Filipino (n = 159) and Japanese (n = 141). Of the total sample (N = 43,093), 300 individuals reported NH/PI ethnicity.

Substance Use

Information was gathered on both alcohol and medicine consumption. For alcohol, participants' responses identified them as *ever a drinker* or *never a drinker*. For medicine use, information was collected regarding the lifetime and past-year use of drugs, and participants were classified as *ever a drug user* or as a *non-drug user*. For the present study, those classified as *ever a drug user* or *ever a drinker* were included in analysis. Of the total number of Asians in the sample (n = 1,334), 578 Asians reported ever having used alcohol and 169 reported ever using drugs. Of the total number of NH/PIs in the sample (n = 300), 163 NH/PIs reported having ever been a drinker and 66 reported ever using drugs.

Barriers to Substance Abuse Treatment

Participants were asked if there "was ever a time when you thought you should see a doctor, counselor or other health professional or seek any other help for your drinking, but you didn't go?" (p. 28). The same question was asked for drug treatment utilization, substituting "drug use" for "drinking" (p. 58). Those that answered "Yes" were directed to a list of 27 reasons for not getting help, and were asked to mark all that apply. Of the Asian Americans who reported ever using alcohol (n = 578), 11 endorsed needing treatment but not seeking it, while 8 reported this for drug use (n = 169). Of the NH/PIs who reported using alcohol (n = 163), 12 endorsed needing treatment but not seeking it, while 5 reported this for drug use (n = 66).

Data Analysis

We utilized a chi-square analysis to calculate frequencies for those who self-identified as Asian American or Native Hawaiian/Pacific Islander for the help-seeking and barriers to treatment variables. We then compared the frequencies for drug and

alcohol use for each ethnic group to determine if differences between frequencies were statistically significant ($p < .05$)

Results

From the sample, 11 Asian Americans and 12 NH/PIs indicated that there was ever a time when they thought they should seek help for alcohol use but did not go. In regard to help-seeking for drug use, 8 Asian Americans and 5 NH/PIs indicated there was a time they thought they should seek help but did not. Our chi-square analysis results indicate that a statistically significant disproportionate amount of NH/PIs do not seek help for their drinking, χ^2 (1, n = 23) = 12.60, p = .0004, as seen in Table 1. However, results for seeking help for drug use were not statistically significant, χ^2 (1, n = 13) = .73, p = .39, as seen in Table 2.

These results seem particularly informative when looking at the number of individuals meeting diagnostic criteria for substance use disorders. For alcohol, 11% of Asian Americans and 25% of NH/PIs met criteria for either abuse or dependency, χ^2 (1, n = 226) = 36.20, p = .0001, as seen in Table 3. For drug use, 4% of Asian Americans and 7% of NH/PIs met criteria for either abuse or dependency, χ^2 (1, n = 78) =5.30, p = .02, as seen in Table 4. Although a higher proportion of NH/PIs meet diagnostic criteria for an alcohol use disorder, they are less likely to seek alcohol treatment. A smaller difference occurred in the proportion of NH/PIs and Asian Americans that meet criteria for drug abuse or dependency.

As seen in Table 5, a separate analysis of the differential barriers was not possible due to small cell counts. A limited number of Asian Americans and NH/PIs reported an

unmet need for treatment for both drugs and alcohol. Our results suggest that barriers to treatment are heterogeneous across the two groups.

Table 1

Individuals reporting a need for alcohol treatment and not receiving it

	NH/PI	Asian American
Yes	12	11
No	151	567
Total	163	578

Table 2

Individuals reporting a need for drug treatment and not receiving it

	NH/PI	Asian American
Yes	5	8
No	61	161
Total	66	169

Table 3

Individuals meeting criteria for alcohol abuse or dependency

	NH/PI	Asian American
No Diagnosis	226	1182
Diagnosis of Abuse or Dependence	74	152

(Table continues)

Total	300	1334

Table 4

Individuals meeting criteria for drug abuse or dependency

	NH/PI	Asian American
No Diagnosis	278	1278
Diagnosis of Abuse or Dependence	22	56
Total	300	1334

Table 5

Reasons for not seeking treatment

	NH/PI		Asian American	
	Alcohol (n = 12)	Drugs (n = 5)	Alcohol (n = 11)	Drugs (n = 8)
1. Wanted to go but health insurance didn't cover	1	0	1	1
2. Didn't think anyone could help	3	3	1	1
3. Didn't know anyplace to go for help	0	0	0	1
4. Couldn't afford to pay the bill	1	0	1	1
5. Didn't have any way to get there	0	0	1	0

(Table continues)

6. Didn't have time	1	0	1	1
7. Thought problem would get better by itself	3	2	4	2
8. Too embarrassed to discuss it with anyone	4	1	1	1
9. Afraid of what boss, family, friends or others would think	2	0	1	1
10. Thought I should be strong enough to handle alone	4	1	2	2
11. Afraid they would put me in the hospital	0	0	0	1
12. Afraid of the treatment	0	0	0	0
13. Hated answering personal questions	2	0	2	0
14. Hours were inconvenient	1	0	1	0
15. Family member objected	0	0	0	0
16. Family thought I should go; I didn't think it necessary	0	0	2	0
17. Can't speak English very well	0	0	0	0
18. Afraid I would lose my job	0	0	0	1
19. Couldn't arrange child care	0	0	0	0
20. Had to wait too long to get in to a program	0	0	0	0
21. Wanted to keep drinking or got drunk / Wanted to keep using medicine or drug	1	0	2	1

(Table continues)

	3	0	0	0
22. Didn't think drinking problem was serious / Didn't think medicine or drug problem was serious	1	0	2	1
23. Didn't want to go	1	0	1	0
24. Stopped drinking on own / Stopped using medicine or drug on own	0	1	1	1
25. Family or friends helped me stop drinking	0	0	0	1
26. Tried getting help before and it didn't work	0	0	2	1
27. Other reason				

Discussion

Too often, psychological science ignores cross-cultural variation (Sue, 1999). Additional research is needed to expand the knowledge of ethnic diversity in substance abuse and treatment utilization (Varma & Siris, 1996). This is especially true for NH/PIs, whose consumption patterns have not been examined in detail (Makimoto, 1998). In the current study, we sought to understand barriers to substance abuse treatment endorsed by the NH/PI sample, and if differences exist between this population and those who identify as Asian American. We utilized a large, nationally representative sample that allowed for separate Asian American and NH/PI ethnic categories. Specifically, our study considered those that reported a need for treatment but did not receive it and those individuals' reasons for not seeking help.

We hypothesized that due to ethnic differences between the two groups, barriers to substance abuse treatment would differ. Our study produced noteworthy findings. We

found that NH/PIs were more likely to meet criteria for a substance use disorder than Asian Americans. However, when compared with Asian Americans, NH/PI individuals report that they are less likely to seek needed treatment for alcohol. Results for seeking needed treatment for drug use were not significant. Asian Americans as a homogeneous group have been found to seek treatment less frequently than Caucasians (Sakai et al., 2005; Zhang et al., 1998). Our research suggests that NH/PIs are even less likely to seek alcohol treatment than Asian Americans, and that the two groups have similar rates of seeking drug treatment.

What may have led to the disparity in seeking alcohol treatment for NH/PIs? The increasing presence of alcohol in NH/PI culture may contribute to the normalization and social acceptance of drinking. One Native Hawaiian focus group agreed that alcohol is consumed "whenever and wherever people gather" (Austin, 2004, p. 727), which may lead drinkers to minimize its negative impact and downplay harmful effects. Although this declaration was the result of a small group discussion, the opinions of those within the community cannot be underestimated. In Hawaii, it has been found that Native Hawaiians are second to Caucasians in the proportion of drinkers, and that they consume more alcohol than other ethnic groups (Waitzfelder et al., 1998). Reluctance among NH/PIs to seek alcohol treatment may exist because it would require an admission of the inability to control drinking behavior when others are able to do so. This seems true even when there is recognition that a need for treatment exists. The stigma attached to entering treatment for alcohol may be strong enough to discourage NH/PI individuals from seeking help, as Native Hawaiians often resist treatment until they are in a state of dependence (Murakami, 1993). Alcohol use can be seen as a family norm, and one

member admitting it as problem may be seen as critical or rejecting of the family by other members (Waitzfelder et al., 1998).

However, research cites many of these same reasons (shame, stigma) among Asian Americans as contributors for low utilization rates of alcohol treatment (Makimoto, 1998; Sakai et al., 2005). This leads us to wonder why help-seeking behavior was lower in our study for NH/PIs than for Asian Americans. The significant difference in treatment seeking may have stemmed from a cultural difference in alcohol acceptance. NH/PIs have been found to have similar rates of drinking to Caucasians, who have been found to engage in more alcohol consumption than other ethnic groups, (Wong et al., 2004), while research shows that Asian Americans are more likely to abstain from alcohol than Caucasians (Sakai et al., 2005). For many Asian American groups, drinking has not reached the cultural mainstream and thus is not widely accepted (Lee et al., 2003). In our study, we observed more than double the amount of NH/PIs than expected who indicated a need but did not receive treatment. The number of Asian Americans was significantly less than expected. From the sample of NH/PIs indicating that they were ever a drinker, 25% of met criteria for alcohol abuse or dependence, while only 11% of the Asian American sample who reported ever being a drinker met diagnostic criteria for alcohol abuse and dependence. Less use and acceptance within the community may lead an Asian American individual who is abusing alcohol to experience more social pressure to stop using alcohol and seek help than a NH/PI.

Genetic differences may have also led to a disparity in alcohol treatment seeking, but not drug treatment seeking. Certain alleles that prevent heavy alcohol use have been found in some Asian American groups but not studied extensively in NH/PIs (Luczak, et

al., 2005). Asian Americans possessing the alleles that do engage in alcohol use may seek treatment due to physical reactions, while it is unknown if this impacts NH/PIs. Further research is warranted to examine the existence of alleles among NH/PIs.

Results did not indicate a significant disparity between NH/PI individuals and Asian Americans who thought they needed treatment for drugs and those that received treatment. According to our study, NH/PIs and Asian Americans have similar rates of help seeking for drugs, although the number of individuals in both ethnic groups who endorsed this was low, leading to results based on only a handful of individuals. Why did the results not significantly differ for drug treatment? Limited research on drug use (Arria & Anthony, 2005; Hunt et al., 2005) and treatment entry (Ja & Aoki, 1993; Waitzfelder et al., 1998; Wong et al., 2003) for Asians Americans and, more so, NH/PIs, disallows a clear answer.

One possible mechanism for this finding is that similar attitudes about drug use between the two groups may have prevented finding a significant difference. Drug use, although prevalent, may not be as pervasive as alcohol for NH/PIs or Asian Americans, given that studies have found drugs to be less common than alcohol in both communities (Austin, 2004; Derauf, Katz, Frank, Grandinetti & Easa, 2003; Lee et al., 2003; Price et al., 2002). In our study, we found fewer individuals reporting a need for drug treatment than alcohol treatment for both ethnic groups. From the sample, about 4% of Asian Americans and 7% of NH/PIs met criteria for drug abuse or dependency. This differs from results for alcohol given that the number of individuals reporting use is fewer, and the difference in proportion of users is less.

A stigma about drugs may exist for both groups, whereas alcohol is widely accepted among NH/PIs (Austin, 2004; Murakami, 1993) and not Asian Americans (Lee et al., 2003). Similar attitudes across the groups regarding drugs may impact treatment seeking. Although utilization rates were not described in our study, research shows Asian Americans to have lower rates of treatment entry for substances than Caucasians, and that help-seeking is generally underutilized (Price et al., 2002; Sakai et al., 2005; Wong et al., 2003). Therefore, our results suggest that rates for NH/PIs are also low. The increasing pervasiveness of drug use within Asian American (Hunt et al., 2005; Sakai et al., 2005) and NH/PI (Andrade et al., 2006; Freese et al., 2000) culture may lead to future disparities between those that acknowledge the need for treatment and those that seek it. Therefore, research focusing on epidemiology and treatment needs is desired to better understand Asian American and NH/PI drug use and treatment.

Our study suggests a need to consider alcohol and drugs as separate entities when designing promotion, prevention and treatment programs. Differences in help-seeking behavior between alcohol and drugs found in the study imply variations in attitudes and consumption patterns of alcohol and drugs. In addition, the number of NH/PIs meeting criteria for alcohol abuse or dependence also points to an alcohol problem within the community. Thus, it is necessary to target the normalization of drinking among the NH/PI population. Goals of educating the community and promoting the importance of seeking help should be considered. For example, public funding efforts might specifically seek to decrease alcohol normalization among NH/PIs through community awareness campaigns, while they increase the availability of treatment opportunities. Alcohol has been found as pervasive, statewide problem in Hawaii, particularly among Native

Hawaiians (Waitzfelder et al., 1998). In Hawaii, which is home to the largest percentage of NH/PIs of any other state, availability of treatment programs and trained staff have been found to be problematic, especially for residents of islands other than Oahu (Waitzfelder et al., 1998). Programs for youth that incorporate the family may be effective in promoting responsible alcohol use and decreasing its normalization, while also encouraging the use of treatment services. This is consistent with findings that the adaptation of cultural traditions, such as family-based approaches in health and human services programs has resulted in increased participation by Native Hawaiians (Hurdle, 2002). Results also highlight the need to continue to consider cross-cultural variation when conducting research.

There are some limitations in the current study to be considered. We were not able to test our hypothesis and analyze results on differential barriers to seeking alcohol and drug treatment due to the small number of individuals that endorsed a need for treatment but did not receive it. For a large-scale sample, these results were surprising and a notable limitation. The small pool of literature existing on NH/PI substance use, treatment needs and help-seeking behavior limited inferences within the findings. Although we were unable to detect any in the current study, barriers to treatment have previously been found to exist among Asian Americans (Ja & Aoki, 1993). Several factors may have contributed to the small sample of individuals endorsing a need for treatment but not receiving it, including lack of self-awareness regarding one's own problematic substance use or minimal knowledge of what constitutes a problem (Wong et al., 2004). In addition, active denial of substance use may have contributed to the small number respondents admitting a need for treatment. Avoiding shame or embarrassment

by not indicating drug or alcohol abuse has been found with Asian Americans (Sakai, et al, 2005) and NH/PIs (Wong et al., 2004) and could have impacted the results. The methodology of the current study was face-to-face gathering of the data, which may intensify these feelings. In addition, item wording should be considered as a possible influence on individual responding. Specific phrasing of questions has the ability to confuse respondents or create cultural boundaries.

Examining the barriers endorsed by the two groups provides insight into the issue of help-seeking behavior (see Table 5). For NH/PIs who report needing treatment for alcohol, there were two reasons for not seeking help endorsed the most frequently, with four individuals each: *Too embarrassed to discuss it with anyone*, and *Thought I should be strong enough to handle alone.* The social undertones of both of these barriers may be influenced by the normalization of NH/PI drinking behavior. For Asian Americans reporting a need for alcohol treatment, the barriers were more evenly distributed with only one barrier receiving more than two endorsements: *Thought the problem would get better on its own* ($n = 4$). This may be characteristic of Asian Americans' unwillingness to admit a problem or suspiciousness of services that have been found by Uba (1994). For drug use, the barrier most frequently endorsed by NH/PIs was: *Didn't think anyone could help* ($n = 3$), which may reflect the perceived seriousness of drug use in NH/PI culture or a lack of adequate drug treatment facilities, as community members have reported a need for residential and detoxification centers (Waitzfelder et al., 1998). For Asian American drug users, only two barriers were endorsed more than once: *Thought the problem would get better on its own* ($n = 2$, also endorsed for alcohol use), and *Was too embarrassed to discuss it with anyone* ($n = 2$). These may also reveal an unwillingness to admit a

problem, especially with drugs, in order to avoid shame or stigma. Our study suggests that barriers are more heterogeneous than suspected for the two ethnic groups. Future studies should continue to examine perceived barriers to treatment among this population due to the finding that NH/PIs are less likely to seek help for alcohol use.

Future studies may want to expand statistical analysis, while also drawing comparisons of the NH/PI community with other ethnic groups, such as Caucasians, Hispanics, African-Americans and Asian-American sub-groups. Conducting large-scale surveys of NH/PIs is recommended to better understand the community's treatment needs given that the small numbers in our large representative sample limited ability to gather an accurate picture of the entire population. It is advised that researchers continue to examine the question of barriers to substance abuse treatment perceived by the NH/PI population, given that this group may not be seeking needed treatment and differential barriers are still unclear. Understanding the cultural background and implications of drug and alcohol use among NH/PIs can also prove beneficial in understanding use patterns. Variables such as age, gender, family history, economic status and place of birth were not analyzed separately, and could be considered for a more comprehensive understanding of NH/PI substance use treatment needs. Individuals reporting mixed heritage may also warrant further attention.

Our analyses produced the finding that NH/PIs are less likely to report seeking treatment for alcohol than Asian Americans. A significant difference was not found for drug treatment. Reasons for this disparity have been highlighted, including cultural differences in the acceptance and pervasiveness of alcohol and drugs. We also found that NH/PIs meet criteria for substance abuse disorders more often than Asian Americans.

Overall, very few individuals across both ethnic groups reported a need for drug or alcohol treatment and not receiving it. Several mechanisms for this finding have been outlined, including reluctance to admit a problem, lack of self-awareness and sampling procedures. Results provide numerous benefits to the community in describing treatment seeking for NH/PIs separately from Asian Americans while also illustrating the value of considering alcohol and drugs independent from one another. This is a considerable finding and may assist in designing promotion, prevention and treatment programs. Suggestions for public health funding for NH/PIs are to focus on the de-normalization of alcohol use and improving availability, accessibility and knowledge of services. Continued research with the NH/PI population in regard to substance abuse and treatment seeking is essential for understanding the needs and patterns of this community.

References

Andrade, N.N., Hishinuma, E.S., McDermott, Jr., J.F., Johnson, R.C., Goebert, D.A., Makini, Jr., G.K. et al. (2006). The National Center on Indigenous Hawaiian Behavioral Health study of prevalence of psychiatric disorders in Native Hawaiian adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 45*(1), 26-36.

Arria, A.M. & Anthony, J.C. (2005). In A.J. Marsella, A.A. Austin & B. Grant (Eds.), *Social change and psychosocial adaptation in the Pacific Islands (29-51).* New York, NY: Springer.

Austin, A.A. (2004). Alcohol, tobacco, other drug use, and violent behavior among Native Hawaiians: Ethnic Pride and Resilience. *Substance Use and Misuse, 39*(5), 721-746.

Barnes, J.S. & Bennett, C.L. (2002, February). *The Asian Population: 2000.* Retrieved May 10, 2007 from www.census.gov/population/www/cen2000/briefs.html.

Brown, M. (2003). *'Aina* under the influence: The criminalization of alcohol in 19th century Hawai'i. *Theoretical Criminology, 7*(1), 89-110.

Cook, T.A.R., Luczak, S.E., & Shea, S.H. (2005). Associations of ALDH2 and ADH1B genotypes with response to alcohol in Asian Americans. *Journal of Studies on Alcohol, 66*(2), 196-204.

Derauf, C., Katz, A.R., Frank, D.A., Grandinetti, A., Easa, D. (2003). The prevalence of methamphetamine and other drug use during pregnancy in Hawaii. *Journal of Drug Issues, 33*(4), 1001-1016.

Devaney, M.L., Reid, G., Baldwin, S., Crofts, N., & Power, R. (2006). Illicit drug use and responses in six Pacific Island countries. *Drug and Alcohol Review, 25,* 387-390.

Garland, A.F., Lau, A.S., Yeh, M., McCabe, K.M., Hough, R.L., & Landsverk, J.A. (2005). Racial and ethnic differences in utilization of mental health services among high-risk youths. *American Journal of Psychiatry, 162,* 1336-1343.

Grieco, E.M. (2001, December). *The Native Hawaiian and Other Pacific Islander Population: 2000.* Retrieved May 10, 2007 from: www.census.gov/population/www/cen2000/briefs.html

Hunt G., Evans, K., Wu, E., & Reyes, A. (2005). Asian American youth, the dance scene and club drugs. *Journal of Drug Issues, 35*(4), 695-731.

Hurdle, D.E. (2002). Native Hawaiian traditional healing: Culturally based interventions for social work practice. *Social Work, 47*(2), 183-193.

Ja, D.Y. & Aoki, B. (1993). Substance abuse treatment: Cultural barriers in the Asian American community. *Journal of Psychoactive Drugs, 25*(1), 61-71.

James, W.H., Kim, G.K., & Moore, D.D. (1997). Examining racial and ethnic differences in Asian adolescent drug use: The contributions of culture, background and lifestyle. *Drugs: education, prevention and policy, 4*(1), 39-51.

Keaulana, K.A. & Whitney, S. (1990). *Ka wai kau mai o Maleka* "Water from America": The intoxication of the Hawai'ian people. *Contemporary Drug Problems, 17*(2), 161-194.

Lee, M.Y, Law, P. & Eo, E. (2003). Perception of substance use problems in Asian American communities by Chinese, Indian, Korean & Vietnamese populations. *Journal of Ethnicity in Substance Abuse, 2*(3), 1-29.

Luczak, S.E, Shea, S.H., Hseuh, A.C., Change, J., Carr, L.G., & Wall, T.L. (2006). ALDH2*2 is associated with a decreased likelihood of alcohol-induced blackouts in Asian American college students. *Journal of Studies on Alcohol, 67*, 349-353.

Makimoto, K. (1998). Drinking patterns and drinking problems among Asian-Americans and Pacific Islanders. *Alcohol Health and Research World, 22*(4), 270-275.

McDonald, D., Elvy, G. & Mielki, J. (1997). Alcohol in the South Pacific: The mid 1990's. *Drug and Alcohol Review, 16,* 383-390.

Murakami, S.R. (1993). An epidemiological survey of alcohol, drug and mental health problems in Hawaii: A comparison of four ethnic groups. In Spiegler, D. (Ed.). *Alcohol use among U.S. ethnic minorities.* Rockville, MD : U.S. Dept. of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Alcohol Abuse and Alcoholism.

Pearson, R.S. (2003). *Ka Leo O N~ Keiki:* The 2003 Hawaii student alcohol, tobacco and other drug use study (1987-2003): Hawaii adolescent prevention and treatment needs assessment (Executive Summary). Retrieved May 10, 2007 from: http://healthuser.hawaii.gov/health/substance-abuse/prevention-treatment/survey/report2003/2003executivesummary.pdf

Peter, J. & Samo, M. (2005). Federated States of Micronesia: Islands in the Sun. In A.J. Marsella, A.A. Austin & B. Grant (Eds.), *Social Change and Psychosocial Adaptation in the Pacific Islands* (133-144). New York, NY: Springer.

Phongsavan, P., Olatunbosun-Alakija, A., Havea, D., Bauman, A., Smith, B., Galea, G., et al. (2005). Health behaviour and lifestyle of Pacific youth surveys: A resource for capacity building. *Health Promotion International, 20*(3), 238-248.

Price, R.K., Risk, N.K., Wong, M.M. & Klingle, R.S. (2002). Substance use and abuse by Asian Americans and Pacific Islanders: Preliminary results from four national epidemiologic studies. *Public Health Reports 117*(1), S39-S48.

Sakai, J.T., Ho, P.M., Shore, J.H., Risk, N.K., & Price, R.K. (2005). Asians in the United States: Substance dependence and use of substance-dependence treatment. *Journal of Substance Abuse Treatment, 29*, 75-84.

Saleh, M.A. (1994). Patterns, problems and attitudes towards alcohol consumption among Micronesian college students. *Journal of Instructional Psychology, 21*(3), 267-272.

Salzman, M. (2005). The dynamics of cultural trauma: Implications for the Pacific nations. In A.J. Marsella, A.A. Austin & B. Grant (Eds.), *Social change and psychosocial adaptation in the Pacific Islands (29-51).* New York, NY: Springer.

Sharma, M. (2004). Substance abuse and Asian Americans: Need for more research. *Journal of Alcohol and Drug Education, 47*(3), 1-3.

Sue, S. (1999) Science, ethnicity and bias: Where have we gone wrong? *American Psychologist, 54*(12), 1070-1077.

Sue, S. & McKinney, H. (1975). Asian Americans in the community mental health care system. *American Journal of Orthopsychiatry, 45*, 111-118.

Varma, S.C. & Siris, S.G. (1996). Alcohol abuse in Asian Americans. *The American Journal on Addictions, 5*(2) pg 136- 143.

Waitzfelder, B.E., Engel, Jr., C.C., & Gilbert, Jr., F.I. (1998). Substance abuse in Hawaii: Perspectives of key local human service organizations. *Substance Abuse, 19*(1), 7-22.

Wall, T.L., Horn, S.M., Johnson, M.L., Smith, T.L. & Carr, L.G. (2000). Hangover symptoms in Asian Americans with variations in the aldehyde dehydrogenase (ALDH2) gene. *Journal of Studies on Alcohol, 61*(1), 13-17.

Wong, M.M., Klingle, R.S. & Price, R.K. (2004). Alcohol, tobacco, and other drug use among Asian American and Pacific Islander Adolescents in California and Hawaii. *Addictive Behaviors, 29*, 127-141

Wu, L., Schlenger, W.E., and Galvin, D.M. (2006). Concurrent use of methamphetamine, MDMA, LSD, ketamine, GHB, and flunitrazepam among American youths. *Drug and Alcohol Dependence, 84*(1), 102-113

Uba, L. (1994). *Asian Americans: Personality patterns, identity, and mental health.* New York: The Guilford Press.

U.S. Census Bureau. (2007, March 1). Facts for Features: Asian/Pacific American Heritage Month: May 2007. Retrieved May 10, 2007 from http://www.census.gov/PressRelease/www/releases/archives/facts_for_features_special_editions/009714.html

Zane, N. & Kim, J.H. (1994). Substance use and abuse. In N.W.S. Zane, D.T., Takeuchi, & N.J. Young. (Eds.), *Confronting Critical Health Issues of Asian and Pacific Islander Americans* (316-343). Thousand Oaks, CA: SAGE.

Zhang, A.Y., Snowden, L.R., & Sue, S. (1998). Differences between Asian and White American's help seeking and utilization patterns in the Los Angeles area. *Journal of Community Psychology, 26*(4), 317-326.

Lauren M. Levine

Birth Date:
Place of Birth: Denville, NJ

Education:

Master of the Arts, Counseling Psychology — May 2008
University of North Florida — Jacksonville, FL

Bachelor of the Arts, Psychology — May 2003
University of Rhode Island — Kingston, RI
Minor Course of Study: History

Experience:

University of North Florida Counseling Center — Jacksonville, FL
Counseling Intern — 2007 - 2008

Campus Alcohol & Drug Information Center — Jacksonville, FL
University of North Florida Department of Health Promotion
Alcohol and Drug Intervention Counselor — 2006-2007

Comprehensive Community Action Program, Inc. — Cranston, RI
Case Manager – Youth Diversionary Project — 2004-2006
Comprehensive Emergency Services

Brown University Medical School — Providence, RI
Center for Alcohol & Addiction Studies
Research Assistant — 2003-2004