



Published in final edited form as:

J Ethn Subst Abuse. 2009 ; 8(2): 163–177. doi:10.1080/15332640902897081.

Community Risk and Resiliency Factors Related to Drug Use of Rural Native Hawaiian Youth: An Exploratory Study

Scott K. Okamoto [Associate Professor],

Social Work Program, Hawai'i Pacific University

Susana Helm [Assistant Professor],

Department of Psychiatry, University of Hawai'i at Mānoa

Ka'ohinani Po'a-Kekuawela [Graduate Research Assistant],

Social Work Program, Hawai'i Pacific University

Coralee I. H. Chin [Graduate Research Assistant], and

Social Work Program, Hawai'i Pacific University

La Risa H. Nebre [Graduate Research Assistant]

Social Work Program, Hawai'i Pacific University

Abstract

This exploratory, qualitative study examined the community-based risk and resiliency factors related to drug use of rural Native Hawaiian youth. Forty-seven youth from five middle schools participated in focus groups that examined the ecological context of drug use for rural Hawaiian youth. Findings indicated that youth in the study were part of large extended networks of families, and that these networks became a defining characteristic of the rural communities in the study. These familial networks functioned as sources of risk and protection related to drug use for youth participants. Implications for community based practice are discussed.

Keywords

Risk; resiliency; youth; Hawaiian; culture

Youth drug use is an issue of importance for rural communities in Hawai'i (Affonso, Shibuya, & Frueh, 2007; Withy, Andaya, Mikami, & Yamada, 2007). Using focus groups with stakeholders in 11 rural communities across 5 different islands, Withy et al. found that drug use was the second most identified issue related to health disparities in rural Hawaiian communities. To compound the problem, these communities have struggled to identify effective prevention programs that are consistent with their cultural and regional context in both content and delivery. As a result, drug use and its concomitant effects (e.g., crime, youth violence, and drug trafficking) continue to thrive within these areas.

The purpose of this study is to examine the risk and resiliency factors related to drug use of Native Hawaiian youth residing in rural communities. Native Hawaiian youth were a focus of this study, due to their high proportion within rural communities compared to urban or semi-urban communities (Accountability Resource Center Hawai'i, 2006). This place-based, culturally informed study is part of a long term school/community/multi-university partnership

(Helm et al., 2008), with the overall goal of developing a culturally grounded prevention program for rural Hawaiian youth on the Big Island of Hawai'i.

Native Hawaiian Youth and Drug Use

Native Hawaiian youth have been shown to have high rates of substance use/abuse, with significant adverse effects. Native Hawaiian youths have been found to report the highest rate of substance use among ethnic groups in Hawai'i (Lai & Saka, 2005; Mokuau, 2002). Wong, Klinge, and Price (2004) found that, compared with several different Asian/Pacific Islander youth groups in Hawai'i, Native Hawaiian youth generally reported the highest lifetime and 30-day alcohol and other drug (ATOD) rates, and reported the highest need for drug and alcohol treatment. Further, Ramisetty-Mikler, Caetano, Goebert, and Nishimura (2004) found that a higher proportion of Native Hawaiian youth initiated drinking by age 12 compared to Caucasian and other Asian Pacific Islander youths in Hawai'i. They also found that substance use of Native Hawaiian youth was related to unsafe sexual practices. Regarding tobacco use, Glanz, Maskarinec, and Carlin (2005) found that Native Hawaiian/Pacific Islander 7th grade students reported the highest levels of lifetime and 30-day usage, compared with other ethnic groups in Hawai'i. Finally, in terms of illicit drugs, rural communities on the Big Island with a concentration of Hawaiian youth have recently reported high rates of crystal methamphetamine ("ice") use (Affonso et al., 2007).

Risk and Resiliency Theory

Historically, theories of risk and resiliency have focused on the presence or absence of specific factors (e.g., parental psychopathology, low socioeconomic status) which can either threaten or promote positive adaptational outcomes (Moon, Jackson, & Hecht, 2000; Waller, 2001). Risk and resiliency factors were initially conceptualized as discrete, quantifiable variables. For example, Rutter (1979) describes how risk factors are cumulative in nature, such that the greater number of risk factors to which a child is exposed, the greater the chances of adverse outcomes (e.g., psychopathology) in his/her life. Moon et al. examined how the presence and/or levels of several risk variables (e.g., family stressors) and protective variables (e.g., religiosity) predicted youth drug usage. Thus, early conceptualizations of risk and resiliency, and more recent research based on these conceptualizations, have highlighted the additive effect of factors representing these domains. These studies have suggested that the goal should be to decrease the number and/or levels of risk factors and increase the number and/or levels of protective ones for youth.

Theories of risk and resiliency have evolved in several ways. First, there has been an increased emphasis on the ecological context of risk and resiliency. Theoretical studies, such as Waller (2001) and Bogenschneider (1996), described protective factors across various ecological levels (individual, family, community, and culture). Community factors, for example, include good schools, a sense of community, and community well-being, stability, and cohesiveness. However, more recently, Ungar (2004) emphasized the importance of moving beyond the traditional ecological paradigm by understanding resilience as an outcome of negotiations between individuals and their environments. According to Ungar, resilience is socially constructed, contextually specific, and defined by individuals and their social reference group.

Contemporary theories of risk and resilience have also emphasized culture as an important construct. For example, studies have examined the protective effects of ethnic pride (Austin, 2004; Kulis, Napoli, & Marsiglia, 2002), enculturation (Whitbeck, Hoyt, Stubbin, & LaFromboise, 2001), and family members (Waller, Okamoto, Miles, & Hurdle, 2003; Hurdle, Okamoto, & Miles, 2003) on Indigenous youth populations. Regarding family members, Waller et al. used qualitative methods to describe how familial networks functioned to intensify both risk and protection for drug use of Southwestern American Indian youth. Same generation

family members (e.g., cousins, siblings) interacted with participants in the study in multiple contexts (i.e., home, school, and community), which intensified participants' exposure to both drug offers and anti-drug messages by these individuals. While many of these types of studies have shown a direct relationship between culture and positive health outcomes, others have failed to illustrate these findings (e.g., Glanz, Mau, Steffen, Maskarinec, & Arriola, 2007; Oetting, Donnemeyer, Trimble, & Beauvais, 1998). To account for these disparate findings, Oetting et al. argued that culture is a complex moderating variable, and that more research is needed to examine how it impacts health related behaviors (e.g., drug use).

Research Questions

This study addresses two interrelated questions—(1) What are the operative risk and protective factors of Hawaiian youth residing in rural communities on the Big Island of Hawai'i? and (2) What are the implications of these factors for the development of culturally specific drug prevention programs for these communities?

Method

Consistent with Ungar's (2004) constructionist interpretation of resilience research, a qualitative, contextualized approach to inquiry was utilized in this study. Qualitative methods have recently been used in similar studies on the Big Island of Hawai'i, because they promote community participation (Affonso et al., 2007) and investment (Withy et al., 2007).

Data Collection and Participants

Five rural middle schools participated in the study—four Big Island schools plus one pilot study school from a different island. Communities within the sample were included in recent research on health disparities in rural Hawai'i (Withy et al., 2007), and were considered rural by the Hawai'i Rural Health Association. Fourteen focus “mini” groups (Morgan, 1997) with 2–5 Native Hawaiian middle school students per group were conducted ($n = 47$). Smaller (versus larger) groups were selected, because of the sensitive nature of the research and because they were more consistent with cultural norms of rural Hawaiian communities. In order to create homogeneity of group composition (Morgan, 1996; Zeller, 1993), separate groups were held for girls ($n = 26$) and boys ($n = 21$), and efforts were made to create groups using naturally formed social cliques. Group facilitators were of the same gender as the youth participants. Participants were in grades 6 (9%), 7 (53%) and 8 (38%). The average age of participating youth was 12.2 years. All students self-identified as Native Hawaiian, in addition to Pacific, Asian American, Euro-American, and American Indian ethnocultural groups.

Interviews were held at school, either during lunch, recess, or after school, and lasted from 40–60 minutes. The groups began with a discussion “starter” question (Morgan, 1997), in which students were asked to imagine a scenario where someone important to them had offered them drugs or alcohol. This question led students to describe real situations in which drugs had been offered to them or someone they knew, and to share their views on the extent of the drug problem in their school or community and what could be done about it. Particular attention was given to the time, place, drug offerer, and drugs used in specific situations described by the youth. Students were also asked about the ways in which cultural values, practices, and beliefs help middle school youth resist alcohol, marijuana, cigarettes, and other drugs.

Participants were informed to keep all youth disclosures in the group setting confidential. Because we audio taped the interviews, we asked youth to use self-selected pseudonyms to refer to one's self and others in the group discussions, as well as to refer to individuals in their stories. Active parental consent and student assent were obtained for all participants in the

study. All research procedures were approved by the Institutional Review Boards at Hawai'i Pacific University, University of Hawai'i at Mānoa, and the Hawai'i Department of Education.

Data Analysis

All interviews were audio recorded and transcribed verbatim by a member of the research team. Transcripts were then reviewed for accuracy by a different research team member. A comprehensive set of open codes (Strauss & Corbin, 1990) were identified by the Principal and Co-Principal Investigators, and were imported into a qualitative research data analysis program (N VIVO). N VIVO is one of several code-based theory-building programs that allow the researcher to represent relationships among codes or build higher-order classifications (Weitzman, 2000). In order to establish intercoder reliability and validity, all members of the research team collectively coded one transcript, in order to clarify the definition and parameters of all of the codes. Then, all subsequent interview transcripts were separately coded by at least two different research team members. Narrative segments that were not identically coded by the team members were identified, discussed, and justified for inclusion or exclusion in the data set.

Results

Of the 14 focus groups, 12 of them referenced protective factors, while 13 referenced risk factors. For the groups referencing protective factors, the mean percentage of coverage for the code was 22.3, while for risk factors, the mean percentage of coverage was 21.7¹. The narratives from the focus groups indicated that Hawaiian youth in our study were part of large extended networks of families, and that these networks became a defining characteristic of the rural communities in the study. Two sixth grade boys described how familial networks and community context are intertwined with each other, and how this might function as protection against drug use.

Facilitator (S.O.): Have you guys ever been offered drugs or alcohol or cigarettes?

Sean: No.

S.O.: No? Why is that? How come you guys think you've never been offered?

Sean: 'Cause we have good friends, and good family members.

Lucky: Yeah, and like if you have a friend and you didn't know that they're your cousin, you're like being friends with them and [you tell] your mom that [you] have a friend named, "kine" and last name and after she says, "That's [your] cousin."

S.O.: O.K., so Lucky, what you're saying then is that, when you meet a friend in this community, maybe [they] know your family members, and your family [members might] know their family. Is that what you're saying?

Lucky: Yeah, but you didn't know that he was your cousin.

S.O.: Oh, and you didn't even know that he was your cousin until you mentioned the person's name to your mom... And then your mom tells you, "Oh, that person's your cousin." Is that what you're saying?

Lucky: Yeah.

¹In N VIVO, "coverage" refers to the amount of text in a transcript that is devoted to a specific code.

Participants described how familial networks within rural communities created a huge deterrent to drug use. Three eighth grade boys described how drug use behaviors are communicated across the ecosystem (i.e., from school to community to family), creating an intense surveillance system.

Facilitator (S.O.): So, I'm wondering, as you move into the high school [where you'll] have your cousins and your sister, and because [they're] so protective of you, that you'll think twice about your choice about using drugs because you know that it's gonna get back to family somehow.

Willie: Yeah.

S.O.: Right, so Harry, you said your cousin is there at Hilo and if he found out you were using drugs, what would he do with that information?

Honu: He would tell his mom.

Harry: He would tell my mom or his mom, and his mom would tell my mom. So I dunno.

S.O.: And there'd be huge consequences, not just because you used drugs, but because all these other people that are related to you, who know you really well and care about you, are gonna find out, right?

Harry: Yeah.

S.O.: What about you, Honu? That same [kind of] thing?

Honu: Yeah.

S.O.: What would happen if your sister found out that you used drugs when you were in high school?

Honu: She would tell all my family members.

S.O.: And then what would happen?

Honu: They would punish me, very badly [laughs]

S.O.: How would they punish you?

Honu: They would ground me and they would probably send me to another school.

S.O.: Really? Which family members are you talking about?

Honu: Like my mom.

S.O.: Your mom.

Honu: Yeah, my grandma. My aunts.

A group of eighth grade girls who were admitted drug users discussed the challenges related to drug use within the context of close knit familial networks in the community. Their narrative also highlights the surveillance function of these networks.

Facilitator (S.H.): What other adults in addition to parents kind of watch out for you and kind of keep an eye out for you?

Wilma: Auntie's, uncles.

Sunny: Your friend's moms.

Wilma: Yeah, your friends.

Powerpuff: Your sister, your older sister's friends.

Wilma: Your mom's friends, yeah.

S.H.: And auntie's and uncles.

Powerpuff: Cousins.

Wilma: Yeah. My brothers.

Sunny: You have to make sure there's no connection to them. That's the thing.

Powerpuff: Like anyone you're hanging out with.

Wilma: Connections with anybody you know.

S.H.: [Can you explain] that? I don't get [it].

Sunny: Like if you go somewhere and you think like one of your parent's friends or somebody might be there.

Wilma: Like the mall.

Sunny: Then you wouldn't go there, if you do that kind of stuff.

Wilma: You would go somewhere else. And when it's like your brother's friends and you know that they're going to tell your brother, you[re] just like, I guess like have to say "no," be like, "oh no, I don't wanna do that."

Sunny: You have to hide it.

Wilma: 'Cause my brothers going to kill me.

S.H.: Your brothers would kill you. How much older are your brothers?

Wilma: My oldest brother is eight [or] nine years older than me. Then, my other brother is two years older. And they both burn [smoke marijuana] too, I don't know why they're complaining. But they don't know that I know. I have connections.

Powerpuff: See, see how it gets [back to] to her?

Wilma: Yeah, I have connections.

Ascribed (versus biological) familial networks also generated community connectedness and functioned as a protective factor related to drug use for youth in the study. "Skullz" describes how relationships between families across multiple generations in the community enhanced protection against drug use.

Facilitator (S.O.): The other thing that a lot of the other kids told us was that they knew their [friends'] parents, so, it's like...

Skullz: Yeah...

S.O.: ...you're friends and you're really close with somebody, but then that person you're really close with, you know their parents and their parents know your parents...

Skullz: Yeah, like [with] my mom, every friend I know, [their parents] went school with each other, except for one of them. They went school with each other, and some of them still keep in touch, my mom has all [these] jobs, and she goes to see my auntie in Hilo. Everybody I know, everybody I see, they know me for some reason, but I don't know them. They say they know my mom, and then my mom know them a lot. My friends parents, they treat me like real family, like I'm their own, and that's how my grandma [treats] them. She gives them a lot of things, like [they] were [her] own child and stuff like that.

S.O.: So to clarify, you're saying that your mom actually has gone to school with some of your friend's parents.

Skullz: Yeah, like they all came to this school, already. They all graduated from here, they was here from kindergarten, some from first grade, and then, they lasted all the way up until they graduated. And they separated at college, [and] they went to different places, but they still kept in touch after [they left].

S.O.: Is that similar to your friends, Evan?

Evan: Mm hmm.

S.O.: Like, do your friends' parents know your parents, that kind of thing?

Evan: 'Cause my mom, she went to school with them.

S.O.: And that's interesting, what you're [both] saying, 'cause it's like, sometimes you don't even need to know the person. If you know their family, you can already automatically make assumptions about the person.

Skullz: Yeah.

S.O.: So they don't even know who you are...

Skullz: But I know who they are.

S.O.: Right! You know who they are, because, your mom knows their mom, or something [like that].

Skullz: Yeah.

S.O.: And so you could say, "Oh, I just met somebody at school, I don't even know this person..."

Skullz: Yeah.

S.O.: "...his name is John Smith," and she might say, "Oh! Is that like the Smith's from [overlapping voices, names of places in the area]?"

Skullz: Yeah, that happened. Half of the people I know, I was playing with them and when I met their mom, they took me to their house and they said my mom's name and [asked] if [I was] their son, and I'd say, "yeah." [Or] like how I would be out with my mom, and then she'd let me go free sometimes, like when we go the mall, she'd let me go all the way to the arcade. And then, when I [would] see some people, they [would] ask me my father's name and [would say that] they know my father. They [would say], "the next time [you] see [your] father, tell him 'Hi'," and who they were.

"Skullz" also highlights how core aspects of rural communities on the Big Island are characterized by close knit ascribed familial networks. These function to protect youth against adverse outcomes, such as drug use.

Facilitator (S.O.): You know, one of the things that is really so interesting about everything that you guys have been talking about so far, is that the ability to not use drugs in this community is so much related to other people, right? A lot of times, when [adults] talk to you guys about drugs, they tell you about things you can say or do to not do drugs, like "Oh, just say no, just walk away," and you guys mentioned some of those things.

Skullz: Yeah.

S.O.: But, equally as important to me, it sounds like, is that in order to not use drugs, you have to have this type of community that really supports not using. So, like what you were saying Skullz, [being part of] a school that you're proud of and that you feel connected to, right? That you don't want to bring shame to.

Skullz: Yeah...

S.O.: And having families that care about you, and that care about each other.

Skullz: Yeah.

S.O.: ...and look after the kids, as a whole, right? Not just like, "Oh, I just care about my kid, and I don't care about anybody else's." Right? It's almost like, other kids that you're friends with, their parents are like, your aunties and uncles.

Skullz: Yeah, it's like...

S.O.: ...they're like your brothers.

Skullz: Yeah, it's like this family and that family. It's like, they're not separate, [it's] just like they're all together, like they was born together, they were in the same house, they just shared everything together. It was like they had the same mom and dad, and they were brothers and sisters from the start and all the way until now and maybe until the end. So, how they are right now, they want us to be the same thing, like how they are, brothers and sisters, friends, all the way to the end, and that's how they want us to end up. Just like, how they keep in touch, they don't do those kinds of stupid stuffs, and just keep us with our friends—the right people who they know won't do those kinds of stuffs.

In the context of familial networks, risk and protection were not described exclusively as discrete entities in this study. "Bo" describes how pressures to use drugs, and protection from them, can occur within the same family.

Facilitator (S.O.): So Bo, you said you also had a real experience with drugs. Can you tell us what that was like?

Bo: Well actually was my, was one of my family relatives. We all was at this party and then when I was walking, he stop[ped] and asked me to try take one drink of beer. And told him that I gotta go, but he kept following me and asking me to drink beer.

S.O.: Who was this that kept following you?

Bo: It was one of my cousins.

S.O.: One of your cousins. Is this an older cousin?

Bo: Yeah.

S.O.: O.K., and so he kept following you and asked you if you wanted to drink beer.

Bo: Yeah.

S.O.: So, what did you do in that situation?

Bo: I kept walking until I found one of my older cousins and I stayed by him. So then my other cousin walked away.

S.O.: Was that hard to deal with, with the cousin that was asking you if you wanted to drink beer?

Bo: Yeah.

S.O.: Was it hard kind of walking away from him?

Bo: Yeah.

S.O.: How come?

Bo: 'Cause when I would walk, he would keep following next to me and try cut in front of me. Every time he cut in front of me, I was thinking, "why was he doing that?," and I'm too young to do that, and I don't wanna drink.

S.O.: And so, you did a couple things you walked away from him, right? And you also went to another cousin?

Bo: Yeah.

S.O.: And why did you go to this other cousin?

Bo: 'Cause he like, I knew him more better and he was like I can trust him and he was way more older than the cousin who was following me.

Later, "Bo" goes on to describe that the familial relationships in this situation were a primary reason for the difficulty in refusing drugs in this situation. Similar situations from other youth in the study created major challenges in refusing drugs.

Discussion

Using focus groups, this study examined factors related to risk and resiliency of rural Native Hawaiian youth on the Big Island of Hawai'i. Participants described the influence of their biological and ascribed family members on decisions to use or avoid drugs. The level of interconnectedness and collectivism among family members described by youth participants has been described as a cultural characteristic of Asian/Pacific Americans (Castro, Proescholdbell, Abeita, & Rodriguez, 1999), including Native Hawaiians. In fact, recent research has found that, compared to their non-Hawaiian counterparts, Hawaiian adolescents interacted significantly more with their family members (Goebert et al., 2000) and received more family support (Goebert et al., 2004), suggesting that family plays an important and influential role in the lives of Native Hawaiian youth. The findings from this study are consistent with the family oriented value system (i.e., 'ohana system) that is pervasive within the Native Hawaiian culture (Miike, 1996).

Our findings highlight several points that contribute to “redefining” theories of risk and resiliency. First, the influences of family, community, risk, and protection for youth in this study are intertwined and interactive processes. This is counter to early conceptualizations of risk and resilience (e.g., Rutter, 1979), which represented these constructs as discrete and quantifiable. In some cases, both risk and protection occurred within the same situation (e.g., “Bo’s” cousin who protected him from drug offers from another cousin) or from the same individual (e.g., “Wilma’s” brother, who smoked marijuana, but did not want her to smoke). In this way, “risk” and “protection” are not merely the presence or absence of adverse or prosocial factors for Hawaiian youth. Consistent with Ungar (2004), the overall degree of risk or protection for these youth reflects their negotiations with their environmental demands, and the resources that they have to address them.

Second, this study also emphasizes that familial networks are the foundation of community-based risk and resilience for rural Hawaiian youth. Bronfenbrenner (1979) described how “family” and “community” are separate constructs within the mesosystem of an individual. This study suggests that these constructs are synonymous with each other for rural Hawaiian youth. Communities on the Big Island were comprised of extended networks of biological and ascribed family members, and as the findings illustrate, these networks functioned to prevent youth from using drugs. In many circumstances, participants emphasized that anonymity in community settings was rare because of the widespread presence of family members. This created a buffer for youth who did not want to use, while it served as a challenge for youth who were motivated to use drugs. Conversely, youth whose family was comprised of multiple drug users exposed youth to additional risks, since drug offer situations were more frequent, difficult to resist, and occurred in multiple contexts. These findings are similar to research on risk and resiliency of American Indian youth and drug use (e.g., Waller et al., 2003).

Finally, this study helps to explain why research on culture, risk, and resiliency has demonstrated mixed findings (Oetting et al., 1998). For example, Glanz et al. (1997) found that cultural variables and ethnic identity were not related to tobacco use of Hawaiian youth in multivariate analyses, while social influence variables (e.g., parental smoking) were strongly related to adolescent smoking behavior. The conceptualization of culture in Glanz et al.’s study suggests that it is uncorrelated to relational variables (e.g., parental social influence). The present study suggests that this is not the case—social influence variables, such as parental smoking, are heavily influenced by the cultural, familial, and community context in rural Hawai'i. The interconnected relational networks for participants in this study illustrated ways in which culture uniquely influences behaviors of rural Hawaiian youth. More research is necessary to elucidate the complex relationship between culture, context, and youth behaviors (e.g., drug use) for Hawaiian youth populations.

Implications for Practice

This study has several implications for community practice. Based on the findings, drug use interventions for rural Hawaiian youth should incorporate familial networks as part of its content and/or delivery. These networks can be viewed as community-level protective factors and sources of strength for these youth. For example, drug resistance skills training could be within the context of extended family networks. Several youth in this study described how they were preparing themselves for increased situational demands to use drugs in high school by using siblings and cousins as a source of protection. This local knowledge such as this could be operationalized in the content of drug prevention interventions.

Equally important is attention to the delivery of these interventions. Based on the findings from this study, interventions might be delivered most effectively within the family context, rather than exclusively within the school context. For example, Okamoto (2000) evaluated a community-level, multiple family intervention utilized on the Big Island, and found that it had high levels of participation and community satisfaction. For school based interventions, program delivery might function around same-generation family members (e.g., cousins and siblings) either within or between school settings. Interventions such as these might be used as part of a comprehensive approach to drug prevention in rural Hawaiian communities.

Finally, this study suggests that effective interventions designed to address social problems (such as drug use) should be at the local level and need to be constructed with culturally driven community principles in mind. In some ways, this approach is antithetical to the predominant discourse in prevention research, which centers around evidence based practices. Matsuoka (2007) states that the movement for evidence based practice “decontextualizes” interventions for local and indigenous populations in Hawai‘i. Further, Rehuher, Hiramatsu, & Helm (2008) found a lack of nationally endorsed evidence-based drug prevention programs and practices designed by or for Native Hawaiians. Narratives from this study were rich with local knowledge from youth, which can function to culturally “ground” new prevention interventions at the school and community levels, and/or provide the scientific foundation that community practitioners can integrate into their existing culturally rooted practices.

Limitations of the Study

There were several limitations of this study. A convenience sample was utilized, which may or may not have been representative of the views of the youth population in the sampled communities. Also, due to the sensitive nature of the topic, in depth interviews, rather than focus groups, might have been more appropriate in order to yield richer, more valid data. While interviews could be argued as more appropriate from a methodological perspective, attention to group homogeneity and size most likely promoted participation in the groups. Further, respondents stated that the use of pseudonyms enhanced the anonymity of group members, increasing their engagement in the group. Finally, the findings of this study may lack generalizability not only to the general population of Hawaiian youth in Hawai‘i, but to those who reside in rural communities outside of the sampling frame.

Conclusions

This study used qualitative methods to examine the situational demands related to drug offers of rural Hawaiian youth. This study advances theories of risk and resiliency in several important ways. First, family and community risk and resilience are viewed as interconnected constructs for rural Hawaiian youth, intensifying both risk and protection for these youth. This study also contributes to the theoretical relationship between culture and health outcomes, which have historically yielded mixed findings. This information has implications for promoting individual, family, and community health and wellness in rural communities in Hawai‘i, and

may have implications for the development of interventions with other indigenous youth populations.

Acknowledgments

This study was supported by funding from the National Institutes of Health/National Institute on Drug Abuse (K01 DA019884).

References

- Accountability Resource Center Hawai'i. School accountability: School status and improvement report. 2006 [Retrieved on March 17, 2008]. from <http://arch.k12.hi.us/school/ssir/2007/hawaii.html>
- Affonso DD, Shibuya JY, Frueh BC. Talk-story: Perspectives of children, parents, and community leaders on community violence in rural Hawaii. *Public Health Nursing* 2007;24(5):400–408. [PubMed: 17714224]
- Austin AA. Alcohol, tobacco, other drug use, and violent behavior among Native Hawaiians: Ethnic pride and resilience. *Substance Use & Misuse* 2004;39(5):721–746. [PubMed: 15202806]
- Bronfenbrenner, U. *The ecology of human development*. Cambridge: Harvard University Press; 1979.
- Bogenschneider K. An ecological risk protective theory for building prevention programs, policies, and community capacity to support youth. *Family Relations* 1996;45(2):127–138.
- Castro, FG.; Proescholdbell, RJ.; Abeita, L.; Rodriguez, D. Ethnic and minority cultural groups. In: Epstein, EE.; McCrady, BS., editors. *Addictions: A comprehensive guidebook*. London: Oxford; 1999. p. 499-526.
- Hurdle DE, Okamoto SK, Miles B. Family influences on alcohol and drug use by American Indian youth: Implications for prevention. *Journal of Family Social Work* 2003;7(1):53–68.
- Glanz K, Maskarinec G, Carlin L. Ethnicity, sense of coherence, and tobacco use among adolescents. *Annals of Behavioral Medicine* 2005;29(3):192–199. [PubMed: 15946113]
- Glanz K, Mau M, Steffen A, Maskarinec G, Arriola KJ. Tobacco use among Native Hawaiian middle school students: Its prevalence, correlates and implications. *Ethnicity and Health* 2007;12(3):227–244. [PubMed: 17454098]
- Goebert D, Nahulu L, Hishinuma E, Bell C, Yuen N, Carlton B, et al. Cumulative effect of family environment on psychiatric symptomatology among multiethnic adolescents. *Journal of Adolescent Health* 2000;27:34–42. [PubMed: 10867350]
- Goebert DA, Bell CK, Hishinuma ES, Nahulu LB, Johnson RC, Foster J, et al. Influence of family adversity on school-related behavioural problems among multi-ethnic high school students. *School Psychology International* 2004;25(2):193–206.
- Helm S, Okamoto SK, Medieros H, Chin CIH, Kawano KN, Po'a-Kekuawela N, et al. Participatory drug prevention research in rural Hawai'i with Native Hawaiian middle school students. *Progress in Community Health Partnerships* 2008;2(4):307–313. [PubMed: 19696900]
- Kulis S, Napoli M, Marsiglia FF. Ethnic pride, biculturalism, and drug use norms of urban American Indian adolescents. *Social Work Research* 2002;26(2):101–112.
- Lai, M.; Saka, S. Hawaiian students compared with non-Hawaiian students on the 2003 Hawaii Youth Risk Behavior Survey. 2005 [Retrieved April 14, 2008]. from http://www.ksbe.edu/spi/PDFS/Reports/Demography_Well-being/yrbs/
- Matsuoka JK. How changes in the Pacific/Asian region are shaping social work education and practice in Hawai'i. *Social Work* 2007;52(3):197–199. [PubMed: 17850027]
- Miike, L. Health and related services for Native Hawaiian adolescents. In: Kagawa-Singer, M.; Katz, PA.; Taylor, DA.; Vanderryn, JHM., editors. *Health issues for minority adolescents*. Lincoln, NE: University of Nebraska Press; 1996. p. 168-187.
- Mokuau N. Culturally based interventions for substance use and child abuse among Native Hawaiians. *Public Health Reports* 2002;117:S82–S87. [PubMed: 12435831]
- Moon DG, Jackson KM, Hecht ML. Family Risk and Resiliency Factors, Substance Use, and the Drug Resistance Process in Adolescence. *Journal of Drug Education* 2000;30:373–398. [PubMed: 11221574]

- Morgan DL. Focus groups. *Annual Review of Sociology* 1996;22:129–152.
- Morgan, DL. Focus groups as qualitative research. Vol. 2nd ed.. Thousand Oaks, CA: Sage; 1997.
- Oetting ER, Donnermeyer JF, Trimble JE, Beauvais F. Primary socialization theory: Culture, ethnicity, and cultural identification. The links between culture and substance use. IV. *Substance Use & Misuse* 1998;33(10):2075–2107. [PubMed: 9744843]
- Okamoto, S. “Project Family”: A model for parent engagement. In: Chesney-Lind, M.; Mayeda, D.; Koo, J.; Okamoto, S.; Marker, N.; Freitas, K.; Paramore, V., editors. *An inquiry into youth crime and violence in Hawai‘i*. Honolulu, HI: Social Science Research Institute, University of Hawai‘i at Mānoa; 2000. p. 49-53. Rep. No. 406
- Ramisetty-Miklerq S, Caetano R, Goebert D, Nishimura S. Ethnic variation in drinking, drug use, and sexual behavior among adolescents in Hawaii. *Journal of School Health* 2004;74:16–22. [PubMed: 15022371]
- Rehuher D, Hiramatsu T, Helm S. Evidence-based youth drug prevention: A critique with implications for practice-based contextually relevant prevention in Hawai‘i. *Hawai‘i Journal of Public Health* 2008;1(1):52–61.
- Rutter, ME. Protective factors in children’s responses to stress and disadvantage. In: Kent, MW.; Rolf, JR., editors. *Primary prevention of psychopathology: Vol. 3. Social competence in children*. Hanover, NH: University Press of New England; 1979. p. 49-74.
- Strauss, A.; Corbin, J. *Basics of Qualitative Research*. Newbury Park, CA: Sage Publications; 1990.
- Ungar M. A constructionist discourse on resilience: Multiple contexts, multiple realities among at-risk children and youth. *Youth & Society* 2004;35(3):341–365.
- Waller MA. Resilience in ecosystemic context: Evolution of the concept. *American Journal of Orthopsychiatry* 2001;71(3):290–297. [PubMed: 11495331]
- Waller MA, Okamoto SK, Miles BW, Hurdle DE. Resiliency factors related to substance use/resistance: Perceptions of Native adolescents of the Southwest. *Journal of Sociology & Social Welfare* 2003;30(4):79–94.
- Weitzman, EA. Software and qualitative research. In: Denzin, NK.; Lincoln, YS., editors. *Handbook of qualitative research*. Vol. 2nd ed.. Thousand Oaks, CA: Sage; 2000.
- Whitbeck LB, Hoyt DR, Stubben JD, LaFromboise T. Traditional culture and academic success among American Indian children in the upper Midwest. *Journal of American Indian Education* 2001;40(2): 48–60.
- Withy K, Andaya JM, Mikami JS, Yamada S. Assessing health disparities in rural Hawaii using the Hoshin facilitation method. *The Journal of Rural Health* 2007;23(1):84–88. [PubMed: 17300483]
- Wong MM, Klingler RS, Price RK. Alcohol, tobacco, and other drug use among Asian American and Pacific Islander adolescents in California and Hawaii. *Addictive Behaviors* 2004;29:127–141. [PubMed: 14667425]
- Zeller, RA. Focus group research on sensitive topics: Setting the agenda without setting the agenda. In: Morgan, DL., editor. *Successful focus groups: Advancing the state of the art*. Newbury Park, CA: Sage; 1993. p. 167-183.