

Evidence-based Youth Drug Prevention: A Critique with Implications for Practice-Based Contextually Relevant Prevention in Hawai'i

Davis Rehuher¹, BA, Tara Hiramatsu¹, BA, Susana Helm¹, PhD

Abstract

Objective. Publicly funded health and human services increasingly require the use of nationally-endorsed programs, therefore we review these youth drug prevention programs through the lens of Hawaii-based practitioners. This review indicated a chasm in contextually relevant programs and practices created for or by Native Hawaiian, Asian-American, and other Pacific Peoples. This problem is outlined and then we describe a rationale for using participatory research to develop practice-based evidence in drug prevention that is contextually relevant to youth, their families and communities, and youth-serving organizations in Hawai'i. Practice-based evidence refers to locally designed, implemented, and evaluated practice; thus providing evidence about what is working (and how) for a specific context. Contextual relevance refers both to ethnocultural significance, and place-based neighborhood and community dynamics.

Methods: We conducted a detailed examination of Substance Abuse and Mental Health Administration's national registers of evidence-based youth drug prevention. We sampled programs designated as appropriate for Asian-American, Native Hawaiian, or Pacific Islanders, and analyzed for contextual relevance.

Results: Results indicated that nationally-endorsed youth drug prevention programs are not contextually relevant to Hawai'i. As of December 2007, we had identified six programs listed as relevant for Asian Americans, Native Hawaiians, and Pacific Islander youth on the national evidence-based practices directory. In spite of this, five of these programs' evaluations did not include sample populations that reflect the majority ethnocultural groups in Hawai'i. Only one program was implemented and evaluated in Hawai'i, thus reflecting Hawai'i's diverse population, albeit a cultural adaptation

Conclusion: Participatory research can mitigate this gap through practice-based evidence. We view this as an opportunity for Hawai'i and the Pacific to chart the course for participatory prevention science, in other words, a prevention paradigm that is practice-based and contextually relevant. Several organizations have embarked on this journey, and are briefly described.

Introduction

Purpose. Publicly funded health and human services increasingly require the use of nationally-endorsed programs, therefore we sought to review these programs through the lens of Hawai'i-based practitioners and organizations. Our review of nationally-endorsed substance abuse programs unequivocally demonstrated that youth programming in the United States is devoid of culturally grounded programs and practices created for or by Native Hawaiian, Asian-American, and other Pacific Peoples. Therefore, this paper outlines the pressing need for practice-based evidence in substance abuse prevention that is contextually relevant to youth, their families, communities, and youth-serving organizations in Hawai'i. To begin this endeavor, relevant background, concepts, and issues germane to youth drug prevention are described.

Background. First, this project was initiated through an evaluation contract commissioned by the State of Hawai'i Department of Health, Alcohol and Drug Abuse Division. An objective was to identify evidence-based practices for a school complex area service delivery model of youth drug prevention services in Hawai'i. These services may be delivered in a school or community setting. The main finding was the lack of nationally recognized evidence-based youth prevention programs and practices that were validated with samples reflective of the youth population and communities in ethnoculturally diverse Hawai'i. This is important because, as already noted, federal and state funding streams for youth prevention efforts increasingly are inclined to support organizations that select nationally recognized evidence-based programs. This creates a quandary for youth and youth-serving organizations in Hawai'i. On the other hand, important contributions to public health are underway in the field of youth substance abuse prevention in Hawai'i that are ethnoculturally relevant and based in local community dynamics.

Defining Practice-Based Evidence and Contextual Relevance. Practice-based evidence refers to locally designed, implemented, and evaluated practice; thus providing evidence about what is working (and how) for a specific context. In contrast, evidence-based practice refers to externally initiated prevention that is adopted or adapted by a community other than

¹University of Hawai'i, Department of Psychiatry, Honolulu, HI

the one in which it was designed. The former is founded on active local participation and *kuleana*, while the latter is not. The former embraces contextual relevance, whereas the latter embraces generalizability and generic applicability. For the purpose of this paper, contextual relevance in Hawai'i refers to and simultaneously includes two concepts:

Ethnocultural significance as defined by Native Hawaiians, Pacific Peoples, Asian-Americans, and others in Hawai'i; and

Place-based neighborhood and community dynamics.

Standards of Quality in Prevention. There are a variety of standards by which to measure the quality of prevention. For example, the Society for Prevention Research (SPR) recently outlined "standards of evidence" to include interventions that are "efficacious", "effective", or ready for "dissemination".¹ Although a number of nationally disseminated guidelines had existed already, the authors noted an insufficient overlap between them; and therefore, a new system of standards was developed and endorsed by SPR.

- The three-tiered system of standards begins with interventions that meet criteria for "efficacy"; meaning that two or more trials have 1) defined samples and population; 2) valid psychometric properties and methods; 3) statistically rigorous analyses; 4) positive effects, and 5) at least one long term impact. Efficacious prevention refers to rigorously tested programs in "optimal" (i.e. scientifically controlled) conditions.
- The second tier, or "effective" prevention, means that positive outcomes have been demonstrated in both controlled and real world conditions, such as would be expected in youth-serving organizations and schools across Hawai'i. While the intent of such standards may be to help prevention practitioners make decisions about expending prevention resources on programs that work, adapting such programs for use in Hawai'i schools and communities may prove to be contextually irrelevant.
- On the third tier are programs that meet the standard for "dissemination". These programs have been tested in optimal scientific conditions, in real world applications, and have created program materials that other organizations can implement with sufficient fidelity.

While these standards may ensure that valid scientific practices have occurred, these scientific practices do not ensure contextual relevance. Instead, other scientific practices are required in order to ensure

contextual relevance. Therefore, an alternative standard by which to measure the quality of prevention in Hawai'i must address the extent to which a program or practice is rooted in the community context. Achieving this standard means using participatory research practices that are based in real world practice, and in real world experiences of youth, families, and communities. Hawai'i youth would be served better by programs that have been endorsed through such practice-based, contextually relevant evidence.

Summary. To emphasize the imminent need for practice-based contextually relevant prevention and the associated importance of participatory research, a review and critique of nationally recognized evidence-based practices is presented. The methods describe the criteria by which evidence-based practices for this review were selected. Results are organized around the six nationally recognized evidence-based practices selected from those listed on the U.S. Substance Abuse and Mental Health Administration's (SAMHSA) directory. These six were listed on SAMHSA's website as applicable for Asian-Americans, Native Hawaiians, or Pacific Islanders. We discuss the paradox that while nationally endorsed contextually relevant prevention practices are lacking for Hawai'i, the prevailing prevention science paradigm likely will not mitigate this dilemma. We view this as an opportunity for Hawai'i to chart the course for participatory prevention science, in other words, a prevention paradigm that is practice-based and contextually relevant.

Methods

Sample and Procedures. The two national websites listing evidence-based practices in youth substance use prevention were reviewed for content added through December 2007, both of which are administered through SAMHSA:

1. Center for Substance Abuse Prevention (CSAP), Model Programs
2. National Registry of Evidence Based Practices and Programs (NREPP).

Search 1: CSAP. An online search of CSAP's webpage was conducted. CSAP's "implementation" page listed "effective prevention programs for various groups and settings", and provided a link to "Model Programs: Information on science-based model prevention programs that have been rigorously evaluated".² However, according to the webpage, CSAP's model programs initiative was deactivated³ when SAMHSA replaced it with a system with a stronger focus on specific outcomes. NREPP has replaced CSAP's directory.

¹ Programs that did not have a broad substance abuse prevention goal were excluded; for example steroids only, tobacco only, or suicide.

² It is still possible to view Model Program information on this webpage, and these programs will be re-reviewed as a potential NREPP "evidence-based" program. Promising and effective programs will be listed as legacy programs on the NREPP webpage for historical purposes.⁴

Search 2: NREPP. Due to the deactivation of CSAP's Model Program directory, the search for evidence-based substance abuse prevention programs focused on the NREPP directory.³ According to the website, NREPP functions as a source of readily available, scientifically-tested prevention programs. In addition to demonstrating significant positive impacts on youth drug prevention, programs considered for review by NREPP must have met two other minimum criteria: a) peer reviewed findings (or comprehensive evaluation); and b) public access to information for proper implementation (dissemination materials). Programs accepted for review by NREPP have been independently assessed using six indicators of quality research, which align closely with SPR's standards described previously.

The NREPP database organizes interventions based on seven key programmatic elements.⁵ Of interest to this paper are "topics" which include substance abuse prevention, and "populations", which are organized by "age", and "ethnicity/race"ⁱⁱⁱ. Therefore, the NREPP directory of substance abuse prevention was searched specifically for these population elements:

School-Age Youth: ages "6-12 Childhood" and "13-17 Adolescent";

Majority Ethnocultural Groups in Hawai'i^{iv}: "Asian-American" and "Native Hawaiian or other Pacific Islander".

Based on these elements, six NREPP-listed programs were selected for review and critique. It should be noted that more than six programs fit our age and ethnocultural criteria, however some programs were excluded because they were drug-specific, for example steroid use or cigarettes only. We also excluded programs in which substance abuse prevention was not the primary purpose, for example suicide prevention. As stated previously, this review only includes programs that were added to NREPP through December 2007.

Results

Evidence-Based Prevention. Table 1 lists in alphabetical order the six prevention programs organized by: 1) the evidence used to demonstrate significant positive impacts, and 2) the age group to which the program may be applied. Columns are split into age ranges (6-12 and 13-17) as organized by NREPP. However, specific program related data in each cell reflects either the age range, grade in school, or school level as reported in the supporting literature. Therefore, there may not be an exact match between

program elements reported in the literature and those reported by NREPP. These age group columns are further split to indicate the target outcome measure; either direct changes in substance use (alcohol, tobacco, other drugs; ATOD), or indirect changes in the related risk and protective factors (RPF). Table 1 indicates the following:

1. **All Stars** provided evidence for positive impact on substance use onset, specifically alcohol, marijuana, cigarettes, and inhalant use. There are several age groups targeted, though primarily middle school aged youth. Although the program was designed and evaluated for 6th and 7th grades, there are curricula for 4th through 12th grades.
2. **Lions Quest Skills for Adolescents** provided evidence of positive effects on ATOD use from 6th to 8th grade. The evidence corresponds with the grades to which its curriculum is applied.
3. **Positive Action** showed evidence of positive effects on RPFs from 1st-4th grade, and ATOD use from 5th-12th grade; though its curriculum has been designed for grades K-12.
4. **Project ALERT** indicated evidence of positive effects on ATOD use from 7th to 9th grade; and its curriculum may be applied to middle through 9th grade students.
5. **Project Toward No Drug Abuse** specified evidence showing positive effects on ATOD use in both alternative and general high schools, mirroring the age range to which its curriculum is applied.
6. **Second Step** had evidence for positive effects on RPFs from 2nd to 6th grade; and its curriculum was designed for elementary and extended through middle school.

Asian-American, Native Hawaiian, and other Pacific Islander Youth Underrepresented. A main objective of this study was to assess the extent to which nationally endorsed evidence-based practices might be useful in a school complex service delivery model in Hawai'i. Therefore, we reviewed the evidence listed on the NREPP website for each of the six programs identified as relevant to Asian-American, Native Hawaiian, or Pacific Islander youth. We analyzed the extent to which these nationally endorsed evidence-based practices are contextually relevant to Hawai'i. This includes whether the program had been 1) evaluated with samples reflective of the youth population in Hawai'i (ethnoculturally relevant); and 2) originated and developed in Hawai'i (place-based). In some cases, studies listed on NREPP were not publicly

ⁱⁱⁱ As outlined in the introduction, the current prevention paradigm uses the 3-tier system for standards in prevention. Beginning on the first tier with efficacious programs, high quality programs are founded on the idea that the sample and population have been properly defined

^{iv} An important point regarding Filipino-Americans: While the 2000 US Census classifies Filipinos as Asians and not as Pacific Islanders^{6,7}, this distinction is not clear among Filipinos and Filipino scholars.^{8,9}

Table 1. Selected NREPP Prevention Programs

Evidence and Application	6-12 (childhood)		13-17 (adolescent)	
	RPF	ATOD	RPF	ATOD
All Stars				
Evidence				Studies of 6 th and 7 th grade
Application				Curriculum from 4 th -12 th grade
Lions-Quest “Skills for Adolescence”				
Evidence	Studies of 6 th -8 th grade		Studies of 6 th -8 th grade	
Application	Curriculum from 6 th -8 th grade		Curriculum from 6 th -8 th grade	
Positive Action				
Evidence	Studies of 1 st -4 th grade	Studies of 5 th -6 th grade	Studies of 7 th -12 th grade	
Application	Curriculum from K-12 th grade	Curriculum from K-12 th grade	Curriculum from K-12 th grade	
Project ALERT				
Evidence				Studies of 7 th -9 th grade
Application				Curriculum from middle school-9 th grade
Project Towards No Drug Abuse				
Evidence				Studies of ages 14-19
Application				Curriculum for high school
Second Step				
Evidence	Studies of 2 nd -6 th grade		None provided by NREPP	
Application	Curriculum from elementary-middle school		Curriculum from elementary-middle school	

available. In other cases, the literature did not provide details regarding ethnocultural demographic information of analytic samples. Therefore, we conducted additional literature searches by visiting program websites and conducting standard academic literature searches. We also contacted some authors for additional information.

A summary of these findings is presented in order of most contextually relevant to Hawai'i, to least contextually relevant in Hawai'i (Refer to Table 2). None of the six programs were developed in Hawai'i, so none of the programs can be considered place-based.

Positive Action. Of the six selected programs, Positive Action was the only program implemented in Hawai'i (in addition to other parts of the US). The Flay and colleague studies, presented in Table 2, used the school as the unit of analysis as opposed to individual students. Therefore, the ethnic breakdown for this program is reported differently than the other five programs reviewed here. The percent of participation per ethnic group represents the average number of students of that ethnic group attending the participating school. Studies in which Asian-American, Native Hawaiian, and Pacific Islanders participated were: Flay 2006¹⁰ (62%), and Flay 2001¹¹ (with 38% Japanese or Chinese, and 17% NH youth participation). Asian-American, Native Hawaiian, and Pacific Islanders did not participate in the Flay 2003¹² evaluation.

Second Step. Of the five articles listed for Second Step, none included Native Hawaiian youth, while two

included Asian-American and Pacific Island youth. Frey 2005¹³ reported 18% Asian-American youth participation, and Grossman 1997¹⁴ reported a combination of 11% Asian-American and Pacific Island youth participation. Three studies were provided on NREPP, while the other two studies, Cooke 2007¹⁵ and Edwards 2005¹⁶, were found through our literature search.

Lions Quest Skills for Adolescents. Evidence listed on NREPP indicated that neither Native Hawaiians nor Pacific Islanders participated in Skills for Adolescents evaluation studies. Two out of the three studies listed by NREPP were publicly available: Eisen 2003¹⁷ and 2002¹⁸. Both reported findings from the same data set, which included 7% Asian-American youth participation (n=526 out of a total sample of 7426).

Project Towards No Drug Abuse. Three articles reported Asian-American youth participation at very low rates: Sussman 2003¹⁹, 7%; Simon 2002²⁰, 4%; and Sussman 1998²¹, 4%. None of the studies listed on NREPP concerning Towards Not Drugs included Native Hawaiian or Pacific Islander youth.

All Stars. Five articles were reviewed, representing four different data sets beginning with the pilot study through ongoing replications and evaluations. None of these studies included Native Hawaiians or Pacific Islanders in their samples. Two of the five studies included Asian-Americans, but at very low participation rates. Hansen 1996²² reported 10%

Table 2. Ethnic breakdown of selected programs

Evidence	Asian-American	Native Hawaiian	Pacific Islander
Postive Action			
Flay et al. 2006 ¹⁰	11% + 16% Filipinos	35%	5% + 16% Filipinos
Flay et al. 2003 ¹²	N/A	N/A	N/A
Flay et al. 2001 ¹¹	38% (Japanese/Chinese)	17%	N/A
Second Step			
Cooke et al. 2007 ¹⁵	N/A	N/A	N/A
Edwards et al. 2005 ¹⁶	N/A	N/A	N/A
Frey et al. 2005 ¹³	18%	N/A	N/A
Taub 2001 ⁵²	Not reported	Not reported	Not reported
Grossman et al. 1997 ¹⁴	11% (combined)	N/A	11% (combined)
Lions-Quest “Skills for Adolescence”			
Eisen et al. 2003 ¹⁷	7% (n=526)	N/A	N/A
Eisen et al. 2002 ¹⁸	7% (n=526)	N/A	N/A
Laird 1992	Not publicly available	Not publicly avail.	Not publicly avail.
Project Towards No Drug Abuse			
Sun et al. 2006 ⁵³	N/A	N/A	N/A
Sussman et al. 2003 ¹⁹	7%	N/A	N/A
Simon et al. 2002 ²⁰	4%	N/A	N/A
Dent et al. 2001 ⁵⁴	N/A	N/A	N/A
Sussman et al. 1998 ²¹	4%	N/A	N/A
All Stars			
Slater et al. 2006 ⁵⁵	3.4% other (n=4216)	N/A	N/A
Hansen et al. 2004 ²³	2% (n=632)	N/A	N/A
McNeal et al. 2004 ⁵⁶	7.7% other (n=1822)	N/A	N/A
Harrington et al. 2001 ⁵⁷	N/A	N/A	N/A
Hansen 1996 ²²	10% girls; 5.5% boys (n=102)	N/A	N/A
Project Alert			
Ellickson et al. 2003 ²⁷	Not reported	Not reported	Not reported
Ellickson, Bell, Harrison 1993 ⁵⁸	Not reported	Not reported	Not reported
Ellickson, Bell, McGuigan 1993 ⁵⁹	Not reported	Not reported	Not reported
Ellickson et al. 1990 ⁶⁰	Not reported	Not reported	Not reported
Ellickson et al. 1988	Not publicly available	Not publicly avail.	Not publicly avail

Legend

Japanese/Chinese: Evaluator did not have an Asian category

N/A: Not Applicable. Ethnicity was not part of the sample size

Not publicly available: Study provided by NREPP, but unable to find because it’s either an internal document or an unpublished manuscript, therefore it’s not listed in reference section.

Not reported: Ethnic breakdown of sample size was not provided.

Asian-American girls and 5.5% Asian-American boys, but the total sample size for this pilot study was just over 100 youth. In a second pilot study, Hansen and Dusenbury 2004²³ reported 2% Asian-American participation in a study with 632 youth in the sample.

Project ALERT. Surprisingly, none of the studies listed on NREPP concerning ALERT included Asian-American, Native Hawaiian, or Pacific Islander youth. Therefore, further literature searches were conducted beyond NREPP, but still insufficient evidence was found for this designation. Longshore 2007²⁴ and St. Pierre 2005²⁵ were not listed on NREPP but were publicly accessible. Only St. Pierre 2005²⁵ reported

Asian-American involvement, accounting for 1% of the sample. Ellickson (1988) was not a publicly available study. Longshore 2007²⁴, Ghosh-Dastidar 2004²⁶, and Ellickson 2003²⁷ reported findings from the same data set.

Contextual Relevance Continuum. Based on these findings, we developed a contextual relevance continuum, ranging from no contextual relevance on the left-hand side, to Hawai’i-oriented contextual relevance on the right hand side (Figure 1). A score of zero reflects programs that are neither place-based nor applicable to ethnocultural groups beyond Euro-American or White populations. A score of one

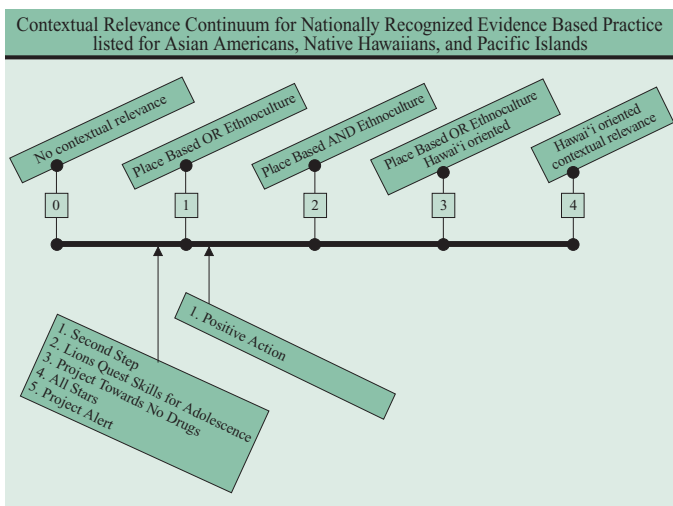


Figure 1. Contextual Relevance Continuum: National Programs

represents programs that are either place-based or were designed for populations including one or more minority groups. A score of 2 represents programs that are both place-based and ethnoculturally relevant, but not with respect to Hawai'i. A score of 3 represents programs that are either Hawai'i place-based or ethnoculturally relevant to Hawai'i. A maximum score of 4 represents programs that are both place-based and ethnoculturally relevant for Hawai'i.

We have placed each of the six programs on this continuum based on our analysis. Our findings indicate that most lacked ethnocultural relevance to Hawai'i, but the samples studied suggest that these programs may be relevant for other ethnocultural groups, and therefore are ranked below a score of 1. Only Positive Action has potential relevance for Hawai'i, and therefore is placed just above a score of 1.

Conclusion

Our review of the literature indicated that nationally-endorsed youth drug prevention programs are not contextually relevant to Hawai'i. As of December 2007, we had identified six programs listed as relevant for Asian-Americans, Native Hawaiians, and Pacific Islander youth on the national evidence-based practices directory. In spite of this, five of these programs' evaluations did not include sample populations that reflect the majority ethnocultural groups in Hawai'i: Second Step, Skills for Adolescents, Towards No Drug Abuse, All Stars, ALERT. Positive Action was an exception in that effectiveness trials had been conducted in Hawai'i, and thus the study samples were reflective of the majority ethnocultural groups in Hawai'i. However, Positive Action has been designed as a cultural adaptation, and is not place-based or ethnocultural-based in Hawai'i.

Implications

Our critique of nationally endorsed evidence-based youth substance abuse programs has identified a lack of cultural and place-based relevance for the youth population in Hawai'i. This was not surprising, considering that preliminary findings from a large scale, systematic content analysis of peer reviewed research on the topic of substance abuse among Asian-Americans and Pacific Islanders since 1970 resulted in only 43 empirical studies.²⁸ Although this study was limited (empirical research on alcohol only was not included and literature search terms may have eliminated empirical work using identifiers such as Native Hawaiian rather than Pacific Islander) findings indicated that in a timeframe spanning over three decades, Asians and Pacific Islanders had been grossly under-researched in the topic of substance abuse. Clearly, this lack of contextually relevant research impedes innovative and effective public health practices in Hawai'i.

As stated in the introduction, a paradox exists in that nationally endorsed contextually relevant prevention practices are lacking for Hawai'i, yet the prevailing prevention science paradigm likely will not mitigate this problem, and may inadvertently contribute to it. While prevention science has made great strides in improving the criteria by which programs and practices are deemed effective¹, the current scientific progress has left many Hawai'i communities behind. Hawai'i communities take pride in their cultural strengths, yet such cultural strengths are not at the core of nationally recognized prevention programs. As a result, Hawai'i communities may need to compromise their commitment to cultural integrity by adopting or adapting other practices, or to opt out of prevention funding that requires implementation of nationally recognized programs.²⁹ Though culturally adapted programs have been shown to be effective with some populations and places, including among Native Hawaiians, Asian-Americans, and Pacific Islanders, these programs have not been sustainable, in large part, because they were derived from external, western epistemologies.

We view this as an opportunity to chart the course for improved public health and prevention science through participatory research. We have highlighted current and possible courses of action that would result in Hawai'i-oriented contextually-relevant substance abuse prevention, e.g. a score of 4 on the continuum.

Participatory research includes a variety of styles that can be located on a continuum from relatively low community participation, with a high degree of distinction between community participants and professional researchers; to fully engaged participation where the community-professional distinction is more equitable.³⁰⁻³² Community-based participatory research

efforts often represent a collaboration between health professionals and community members to redress health disparities.³³⁻³⁷ There also are more community-driven, grassroots efforts referred to as participatory action research, that grew out of social movements in response to historical injustices perpetuated through colonization and other forms of oppression and discrimination.³⁸⁻⁴¹ (For examples of participatory action research with youth in Hawai'i, refer to the work of Helm.^{42,43})

With these basic concepts in mind, we offer a few possible courses of action for improved public health. Our intent is to demonstrate the ways in which participatory research can advance a prevention paradigm that is practice-based and contextually relevant for Hawai'i.

Pono Curriculum, an Exemplar of Practice-Based Evidence in Hawai'i. To get a glimpse of the promise and potential of the practice-based evidence approach, we can look at existing programs that exemplify the concept of participatory action research. Developed by Mr. Wayne Lee and a group of community stakeholders on Molokai, the *Pono Curriculum* is a culture-specific, school-based interactive prevention program that utilizes 21 Native Hawaiian values.⁴⁴ Central to the implementation and success of the program, emphasis is placed on practicing and living the 21 cultural and spiritual principles to increase cultural identity, improve self esteem, improve family and social communication skills, and recognize the dangers of substance abuse. A program outcomes evaluation study published in 2007 found that the *Pono Curriculum* as implemented in selected Hawai'i public schools demonstrated significant positive effects on student school commitment, self esteem, and perception of harmful drugs, along with decreases in drug use.⁴⁴ In addition, this curriculum has facilitated the basis for a culturally grounded residential substance abuse intervention targeting drug-involved youth. The program was developed, in part, through the use of participatory evaluation in a formal community-university partnership spearheaded by Mr. Lee and rural health practitioners.⁴⁵ The *Pono Curriculum* therefore provides a model for locally-initiated and culture-based program initiatives that point toward a contextually relevant prevention paradigm. Though there may be others, based on our extensive review of the literature, this appears to be the first contextually relevant program in Hawai'i that is undergoing rigorous outcomes evaluation. This program scores a 4 on the contextual relevance continuum.

Community-University Research and Action. Another Hawai'i exemplar is the *Promoting Social Competence and Resilience among Native Hawaiian Youth* project.^{46,47} A Big Island community with a well developed strategic plan for combating the drug problem in their area was at a loss for culturally

relevant programs. As a result, they contacted the principal investigator of the *Promoting Social Competence and Resilience among Native Hawaiian Youth* project and invited the research team to work with their community to develop their own program. The goal of this community-university project is to shed light on drug offer scenarios faced by rural Native Hawaiian middle school youth, and then to work with community leaders to identify contextually relevant ways to negotiate these scenarios in a drug-free manner. This program scores a 3.25 on the contextual relevance continuum, although it is place-oriented and culturally relevant, it is a replication study and still relies heavily on conventional research practices.

Participatory Organizational Development. This is another way to integrate the most critical and dynamic programmatic elements that engender success in our local context. It is designed to mitigate the problem of using standardized evidence-based outcomes derived from externally driven (e.g. not local, not place-based) processes. Like empowerment evaluation⁴⁸ and utilization-focused evaluation⁴⁹, the purpose of participatory organizational development is to improve one's own policies and practices. A subtle difference in participatory organizational development is that the standards by which progress is assessed are internally rather than externally defined. The process of defining those standards is participatory among the formal members of the group and the group's beneficiaries. In the case of youth substance abuse prevention, direct service personnel along with the youth members and their families would define those policies, practices, and outcomes.

One such participatory organizational development project has been proposed to prevent underage drinking in Hawai'i, and is actively pursuing funding from federal sources. The *Hulali Kou'ao*²⁹ project proposes to advance underage drinking prevention

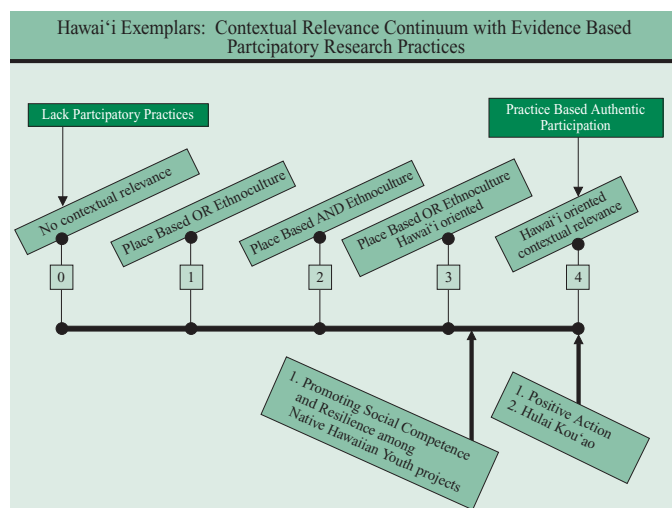


Figure 2. Contextual Relevance Continuum: Charting a Course with Participatory Practice Based Evidence

science by exploring the ways in which their own community-based organizations have designed, implemented, and evaluated underage drinking prevention programs, with culture at the core. Though their project will be place-based, the *Hulali Kou'ao* project expects that their participatory research approach to capacity building and cultural identification may be useful for other Native Hawaiian, indigenous, or culture-specific communities and organizations. In the long-term, their goal is to establish nationally recognized practice-based evidence with cultural practices and cultural epistemology as central. By listing their own program on a database such as NREPP, this community would be able to implement their own program using state or federal funds and under state and federal quality guidelines. This program scores a 4 on the contextual relevance continuum.

Figure 2 shows the contextual relevance continuum with these three Hawai'i programs. Each are culturally relevant to Hawai'i. Each is place-based, though the Pono Curriculum and *Hulali Kou'ao* are more so. The defining characteristic with the latter two initiatives is that they are practice-based as opposed to derived from evidence-based practices. All three programs have been developed with participatory principles, though the latter two are much more so.

In conclusion, this lack of contextually relevant research not only impedes innovative and effective public health practices in Hawai'i, but also nationally. For example, the federal Office of Minority Health has been coordinating the National Partnership for Action to end health disparities for minority populations.⁵⁰ Through their regional conversations among representative health practitioners (from community, government, and academia), priority actions have been identified to eliminate ethnocultural health disparities. During the 2008 western region meeting a participatory research priority was identified: to create and implement a local community-driven process of research. More specifically, this priority focused on (1) increasing federal funding for (2) ethical partnerships in which (3) community-identified issues would drive the research agenda, (4) support authentic participation of community researchers such that (5) an action-oriented intervention would result in (6) clear and direct community benefits.⁵¹ While such a national agenda has yet to be put in motion, the Hawai'i-based examples cited above can serve as a guide.

Acknowledgements:

Grant support: This project was supported by funding from the State of Hawai'i Department of Health, Alcohol and Drug Abuse Division [ASO Log-07-155].

Corresponding author: Susana Helm
Ph.D., Assistant Professor,
Department of Psychiatry
University of Hawai'i at Mānoa
441 Kapi'olani Blvd, Suite 1803
Honolulu, HI 96814
Phone: 808.945.1462
Fax: 808.945.1522
E-mail: HelmS@dop.hawaii.edu.

References

1. Flay BR, Biglan A, Boruch RF, Gonzalez Castro F, Gottfredson D, Kellam S, Moscicki EK, Schinke S, Valentine JC, Ji P. Standards of evidence: criteria for efficacy, effectiveness and dissemination. *Prev Science*. 2005;6(3):151-175.
2. Center for Substance Abuse Prevention [homepage on the Internet]. Rockville: Substance Abuse and Mental Health Services [cited 2007 Aug]. *Implementation*; [about 1 screen]. Available from: <http://prevention.samhsa.gov/implementation/default.aspx>
3. National Registry of Evidence-based Programs and Practices [homepage on the Internet]. Rockville: Substance Abuse and Mental Health Services Administration [updated 2007 Oct 30; cited 2007 Sept 27]. *Frequently asked questions*; [about 2 screens]. Available from: <http://nrepp.samhsa.gov/help-faqs.htm#difference>.
4. National Registry of Evidence-based Programs and Practices [homepage on the Internet]. Substance Abuse and Mental Health Services Administration [updated 2007 Oct 1; cited 2007 Aug]. Available from: <http://www.nrepp.samhsa.gov>
5. National Registry of Evidence-based Programs and Practices [homepage on the Internet]. Rockville: Substance Abuse and Mental Health Services Administration [updated 2007 Oct 1; cited 2007 Aug]. *Find Interventions*; [about 1 screen]. Available from: <http://nrepp.samhsa.gov/find.asp>
6. US Census Bureau. *The Native Hawaiian and other Pacific Islander population: 2000* [data table online]. c2000 [cited 2007 Nov]. Available from: US Census Bureau, Census 2000.
7. US Census Bureau. *We the people: Asians in the United States* [data table online]. c2000 [cited 2007 Nov]. Available from: US Census Bureau, Census 2000 special tabulation.
8. Enriquez VG. *Filipino psychology in the third world*. Philippines: Philippine Psychology Research and Training House; 1989.

9. Okamura JY, Agbayani AR, Kerkvliet MT, guest editors. The Filipino American Experience in Hawai'i. In commemoration of the 85th anniversary of the Filipino immigration to Hawai'i [special issue]. *Social Process in Hawai'i*. 1991;33.
10. Flay B, Acock A, Vuchinich S, Beets M. *Progress report of the randomized trial of Positive Action in Hawai'i: end of the third year of intervention (2005 Spring)*. (Unpublished manuscript). Oregon State University, Corvallis, OR.
11. Flay B, Allred C, Ordway N. Effects of the Positive Action program on achievement and discipline: two matched-control comparisons. *Prev Sci*. 2001;2(2):71-89.
12. Flay B, Allred C. Long-term effects of the Positive Action program. *Am J Health Behav*. 2003;27 Suppl 1:S6-21.
13. Frey KS, Nolen SB, Van Schoiack-Edstrom L, Hirschstein MK. Effects of a school-based social-emotional competence program: linking children's goals, attributions, and behavior. *J Appl Dev Psychol*. 2005;26:171-200.
14. Grossman DC, Neckerman HJ, Koepsell TD, Liu PV, Asher KN, Beland K, Frey K, Rivera FP. Effectiveness of a violence prevention curriculum among children in elementary school: a randomized controlled trial. *J Am Med Assoc*. 1997;277(20):1605-11.
15. Cooke MB, Ford J, Levine J, Bourke C, Newell L, Lapidus G. The effects of city-wide implementation of "Second Step" on elementary school students' prosocial and aggressive behaviors. *J Prim Prev*. 2007;28:93-115.
16. Edwards D, Hunt MH, Meyers J, Grogg KR, Jarrett O. Acceptability and student outcomes of a violence prevention curriculum. *J Prim Prev*. 2005;26:401-18.
17. Eisen M, Zellman GL, Murray DM. Evaluating the Lions-Quest "Skills for Adolescence" drug education program: second year outcomes. *Addict Behav*. 2003;28:883-97.
18. Eisen M, Zellman GL, Massett HA, Murray DM. Evaluating the Lions-Quest "Skills for Adolescence" drug education program: first-year behavior outcomes. *Addict Behav*. 2002;27:619-32.
19. Sussman S, Sun P, McCuller WJ, Dent CW. Project Towards No Drug Abuse: two-year outcomes of a trial that compares health educator delivery to self-instruction. *Prev Med*. 2003;37:155-62.
20. Simon TR, Sussman S, Dahlberg LL, Dent CW. Influence of a substance abuse prevention curriculum on violence-related behavior. *Am J Health Behav*. 2002;26:103-10.
21. Sussman S, Dent CW, Stacy A, Craig S. One-year outcomes of Project Towards No Drug Abuse. *Prev Med*. 1998;27:766. Erratum for: *Prev Med*. 1998;27:632-42.
22. Hansen WB. (1996). Pilot test results comparing the All Stars program with seventh grade D.A.R.E.: program integrity and mediating variable analysis. *Substance Use and Misuse*, 31(10), 1359-1377.
23. Hansen W, Dusenbury L. (2004). All Stars Plus: A competence and motivation enhancement approach to prevention. *Health Education*, 104(6), 371-381.
24. Longshore D, Ellickson PL, McCaffrey DF, St. Clair PA. School-based drug prevention among at-risk adolescents: effects of ALERT Plus. *Health Edu Behav*. 2007;34:651-68.
25. St. Pierre TL, Osgood DW, Mincemoyer CC, Kaltreider DL, Kauh TJ. Results of an independent evaluation of Project ALERT delivered in schools by Cooperative Extension. *Prev Sci*. 2005;6:305-17.
26. Gosh-Dastidar B, Longshore DL, Ellickson PL, McCaffrey DF. Modifying pro-drug risk factors in adolescents: results from Project ALERT. *Health Educ Behav*. 2004;31:318-34.
27. Ellickson PL, McCaffrey DF, Gosh-Dastidar B, Longshore DL. New inroads in preventing adolescent drug use: results from a large-scale trial of Project ALERT in middle schools. *Am J Public Health*. 2003;93:1830-36.
28. Kameoka VA, Thai ND, Wong FY, editors. Substance use and abuse among Asian Americans and Pacific Islanders. Proceedings of the American Psychological Association Convention; 2004 Aug.
29. Helm S, Lee A, Lee W, Davis R, Helm K, Ayau-Pescaia M, Lawelawe F, Takamiya T, Pastrana JK. *Concept paper*. Unpublished manuscript. Department of Psychiatry, University of Hawai'i.
30. Potts RG. Emancipatory education versus school-based prevention in African American communities. *Am J Community Psychol*. 2003;31(1/2):173-183.
31. Bond MA. Defining the research relationship: Maximizing participation in an unequal world. In: Tolan P, Keys C, Chertok F, Jason L, editors. *Researching community psychology: issues of theory and methods*. Washington, DC: American Psychological Association, 1990; p. 183-86.
32. Horton M, Freire P. *We make the road by walking. Conversations on education and social change*. Philadelphia: Temple University Press; 1990.
33. The Examining Community-Institutional Partnerships for Prevention Research Group. *Developing and sustaining community-based participatory research partnerships: a skill-building curriculum*. [homepage on the Internet]. No date. [cited 2006 Oct]. Available from: <http://www.cbprcurriculum.info>
34. University of Washington. *Community Campus Partnerships for Health: Community-based participatory research* [homepage on the Internet].

- C2007 [cited 2006 Oct]. Available from: <http://depts.washington.edu/ccph/commbas.html#Principles>
35. Israel BA, Eng E, Schulz AJ, Parker EA. *Methods in community-based participatory research for health*. San Francisco: Josey-Bass; 2005.
 36. Viswanathan M, Ammerman A, Eng E, Gartlehner G, Lohr KN, Griffith D, Rhodes S, Samuel-Hodge C, Maty S, Lux L, Webb L, Sutton SF, Swinson T, Jackman A, Whitener L. *Community-based participatory research: assessing the evidence*. Rockville (MD): Agency for Healthcare Research Quality; 2004. Evidence Report/Technology Assessment No. 99. Report No.: AHRQ Publication 04-E022-2.
 37. Prilleltensky I, Nelson G. *Doing psychology critically. Making a difference in diverse settings*. New York: Palgrave Macmillan; 2002.
 38. Watts RJ, Griffith DM, Abdul-Adil J. Sociopolitical development as an antidote for oppression. Theory and action. *Am J Community Psychol*. 1999;27(2):255-72.
 39. Freire P. *Pedagogy of freedom. Ethics, democracy, and civic courage*. Lanham: Rowman & Littlefield Publishers, Inc; 1998.
 40. Freire P. *Pedagogy of the oppressed*. 20th anniversary ed. New York: Continuum Publishing Company; 1998.
 41. Fals-Borda O. *Participatory action research*. Development: Seeds of Change. 1984;2:18-20.
 42. Helm S. Youth leadership in school-community interventions: a lesson in community resources. *Community Psychologist*. 2006;39(1):13-14.
 43. Helm S, Bailon K, Cooper L, Inouye T, Lacambra G, Libed A, Rowe S, Seino T, Wong-Sumida J. *An after-school youth development program: a school-community-university collaboration in putting ideas to action*. Proceedings of the Biennial Conference of the Society for Community Research and Action; 1999 June; New Haven, CT.
 44. Kim R, Withy K, Jackson D, Sekaguchi L. Initial Assessment of a culturally tailored substance abuse prevention program and applicability of the risk and protective model for adolescents of Hawaii. *Hawaii Med J*. 2007;66:118-23.
 45. Withy KM, Lee W, Renger RF. A practical framework for evaluating a culturally tailored adolescent substance abuse treatment programme on Molokai, Hawaii. *Ethnicity and Health*; 12(5):483-496; 2007.
 46. Okamoto SK, Helm S, Poa-Kekuawela K, Chin CIH, Nebre L. *Exploring Culturally Specific Drug Resistance Strategies of Hawaiian Youth in Rural Communities* (under review).
 47. Helm S, Okamoto SK, Medeiros H., Kawano, KN, Chin CIH, Poa-Kekuawela K, Nebre, L., Sele, FP. Participatory drug prevention research in rural Hawai'i with Native Hawaiian middle school students. *Progress in Community Health Partnerships*, (in press).
 48. Fetterman DM, Wandersman A. Eds. *Empowerment evaluation principles in practice*. New York: Guilford Press; 2005.
 49. Patton MQ. *Utilization focused evaluation*. Newbury Park, CA: Sage; 1996.
 50. US Department of Health and Human Services. National Partnership for Action to End Health Disparities. *Regional conversations*. [updated 2008 June; cited 2008 July]. Available from: <http://www.omhrc.gov/npa/templates/browse.aspx?lvl=1&lvlid=12>
 51. Helm S, Rama S, Kintu E, Sims C. *A community research agenda to end ethnocultural health disparities*. Roundtable discussion at the Region IX and X National Partnership for Action; 2008; Scottsdale, AZ.
 52. Taub J. Evaluation of the Second Step violence prevention program at a rural elementary school. *School Psych Rev*. 2001;31(2):186-200.
 53. Sun W, Skara S, Sun P, Dent CW, Sussman S. Project Towards No Drug Abuse: long-term substance use outcomes evaluation. *Prev Med*. 2006;42:188-92.
 54. Dent CW, Sussman S, Stacy AW. Project Towards No Drug Abuse: generalizability to a general high school sample. *Prev Med*. 2001;32:514-20.
 55. Slater MD, Kelly KJ, Edwards RW, Thurman PJ, Plested BA, Keefe TJ, Lawrence FR, Henry KL. Combining in-school and community-based media efforts: reducing marijuana and alcohol uptake among younger adolescents. *Health Ed Research*. 2006;21(1):157-167.
 56. McNeal RB, Hansen WB, Harrington NG, Giles SM. How All Stars works: an examination of program effects on mediating variables. *Health Ed and Behavior*. 2004;31(2):165-178.
 57. Harrington, N. G., Giles, S. M., Hoyle, R.H., Feeney, G. J., & Yungbluth, S. C. (2001). Evaluation of the *All Stars* character education and problem behavior prevention program: Effects on mediator and outcome variables for middle school students. *Health Education & Behavior*, 29(5), 533-546.
 58. Ellickson PL, Bell RM, Harrison ER. Changing adolescent propensities to use drugs: results from Project ALERT. *Health Educ Q*. 1993;20(2):227-42.
 59. Ellickson PL, Bell RM, McGuigan K. Preventing adolescent drug use: long-term results of a junior high program. *Am J Public Health*. 1993;83(6):856-61.
 60. Ellickson PL, Bell RM. Drug prevention in junior high: a multi-site longitudinal test. *Science*. 1990;247(4948):1299-1305.