The Paradox of Discrimination, the "Aloha Spirit," and Symptoms of Depression in Hawai'i

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Abstract

It remains to be determined whether the "aloha spirit" is a cultural resource that influences psychological well-being in Hawai'i. Thus, the purpose of this study is to investigate whether the aloha spirit is associated with levels of psychological distress and the risk of depression, while taking into account various risk factors. Data for this study were drawn from an anonymous survey of undergraduate students (N = 1,028) at the University of Hawai'i. Regression results revealed that having learned the aloha spirit was associated with significantly lower levels (b = -1.76; P < *.01) of psychological distress and a reduced odds of depression (OR = .69;* P < *.01) over and above the effects of perceived discrimination, local identity, levels of ethnic identification, race/ethnicity, immigrant status, duration of residence in Hawai'i, and other sociodemographic factors. In contrast, everyday discrimination was associated with significantly higher levels (b = 0.41;* P < *.001) of psychological distress and a greater odds of depression (OR = 1.08;* P < *.001). Together, these findings highlight the paradox of discrimination and the aloha spirit in Hawai'i by documenting their distinct relationships with mental health. Overall, this study contributes to medical and public health research on mental health disparities during the transition to adulthood by delving into the social context of daily life in the understudied, multicultural location of Hawai'i.*

Keywords

aloha spirit, discrimination, symptoms of depression, the transition to adulthood, Hawai'i

Introduction

The term "aloha spirit" has been thought to involve compassion, tolerance, and social harmony, which has contributed to Hawai'i being considered a multicultural paradise.[1] Yet, this idealistic model of Hawai'i has been critiqued and it has been argued that race and ethnic relations are not harmonious.[2,3] In fact, social tensions exist among different racial minority groups as well as among ethnic subgroups of Asian Americans, and racial/ethnic discrimination is often experienced by those who are perceived as not "local" or belonging to the local community in the Hawaiian islands.[2-8] For instance, Whites in Hawai'i are both understood by some to be non-local, relatively recent arrivals, and agents of Native Hawaiian dispossession historically. Consequently, Whites are exposed to discriminatory treatment when they are racially marked as "haole" or foreigner regardless of how long they have resided in Hawai'i.[5] Therefore, the prevalence of discrimination across all racial/ethnic groups and the pervasiveness of the aloha spirit in Hawai'i appear to be a paradox.

Research has revealed that discrimination is a public health issue because it not only has social consequences, but also has damaging psychological ramifications. For example, studies have documented a relationship between self-reported experiences of racial/ethnic discrimination and significantly higher levels of psychological distress, assessed with symptoms of depression.[9-11] This growing literature has primarily examined African Americans, Latinos, and more recently Asian Americans.[12-15] Our knowledge is limited about the mental health effects of discrimination as a stressor among Pacific Islanders and in the unique, ethnically diverse location of Hawai'i.[7,16] According to recent US Census estimates, Hawai'i's population has the following racial/ethnic distribution: Asian 38.3% (Filipino 14.4%; Japanese 13.6%; Chinese 4.1%; Other Asian 6.2%); White 25%; Native Hawaiian 6%; Other Pacific Islander 3.8%; Hispanic 9.3%; African American 1.8%; American Indian and Alaska Native 0.2%; and two or more races 23.8%.[17]

The purpose of the current study is to investigate Hawai'i's paradox of discrimination and the aloha spirit by evaluating each of their relationships with mental health. If the aloha spirit involves conveying warm feelings to others and a sense of inclusion, and it is regularly practiced in Hawai'i,[18] it is plausible that it could benefit mental health as a cultural and social-psychological resource. Alternatively, it has been contended that the aloha spirit has been transformed into a popular marketing tool to propel the tourist industry by promoting a welcoming and friendly atmosphere in hotels, stores, and restaurants,[18] and perhaps it may not necessarily function as a cultural resource to enhance the psychological well-being of Hawai'i's population.

The present study addresses an unanswered research question: Is there a relationship between the aloha spirit and psychological well-being in Hawai'i? More specifically, this study examines whether the aloha spirit is associated with significantly lower levels of psychological distress and a reduced risk of depression. The strength of the influence of the aloha spirit on these mental health outcomes is tested by controlling for self-reported experiences of discrimination, levels of ethnic identification, race/ethnicity, immigrant status, duration of residence in Hawai'i, local identity, and other sociodemographic factors. Moreover, the focus of this study is on undergraduate students who are in a formative stage in the life course—the transition to adulthood—when symptoms of depression and anxiety are likely to manifest.[19] Thus, examining this pivotal life stage is important for preventing psychological distress, which can lead to diagnosable depressive and anxiety disorders in adulthood.

Methods

Data were collected using anonymous surveys during 2012 to 2013. Participants consisted of 1,091 undergraduate students at the University of Hawai'i at Manoa. Students completed surveys by writing their responses during class time (10 minutes on average) in undergraduate courses in the departments of Sociology, Women's Studies, Nursing, Philosophy, Accounting, and

Engineering. The survey's procedures were approved by the university's Institutional Review Board (CHS # 20055). The survey questionnaire informed the students about the purpose of the research as well as the benefits and risks, and that their participation was voluntary and confidential. The final sample size was 1,028 after list-wise deletion of missing cases.

Measures

The two dependent variables were based on the 20-item Center for Epidemiologic Studies Depression scale (CES-D). The CES-D is a widely used, valid, and reliable measure for adolescents, young adults, and adults to assess symptoms of depression, also known as psychological distress.[20] The CES-D is a screening measure not intended to be a diagnostic tool. Respondents were asked how they felt in the past week, such as how often they had crying spells, and felt sad or lonely. The response categories were: (0) rarely or none of the time or less than 1 day, (1) some or a little of the time or 1-2 days, (2) occasionally or a moderate amount of the time or 3-4 days, and (3) most or all of the time or 5-7 days. Ordinary least squares (OLS) regression models were conducted for the summed scale, dependent variable measuring self-reported levels of depressive symptoms (Cronbach's alpha = .90) referred to as psychological distress, and logistic regression models were used for the dichotomous depression measure (1 = score > 15 as a proxy for clinical depression).[20]

The focal independent variable was aloha spirit assessed with the following question: Have you learned the Aloha Spirit in Hawai'i? This question was open to the student's own interpretation. Responses ranged from (1) strongly disagree, (2) disagree, (3) agree to, (4) strongly agree. Other focal independent variables included perceived lifetime racial/ethnic discrimination (1 = yes) and everyday discrimination, which was Williams and colleagues' scale measuring day-to-day experiences of unfair treatment not necessarily due to race or ethnicity, such as receiving poorer service than others in restaurants and stores, being treated with less courtesy/respect, and being called names. The summed 9-item scale had high internal consistency (Cronbach's alpha = .89).[9] Response categories were: (0) never, (1) less than once a year, (2) a few times a year, (3) a few times a month, (4) at least once a week, and (5) almost every day.

Control variables included local identity (whether you consider yourself to be a local or not) and Phinney's ethnic identity scale, which consisted of the average of 12 items (Cronbach's alpha = .89).[21] According to Phinney, ethnic identity is a continuum of behaviors, feelings, attitudes, and knowledge about one's racial/ethnic group membership.[21] Responses ranged from strongly disagree (0) to strongly agree (3). Other sociodemographic control variables included racial/ethnic group, gender, age, immigrant status, the number of years of residence in Hawai'i, and parental education. Parents' level of education are often used as a measure of family socioeconomic background among students who are in the early stages of status attainment.[21]

STATA v. 13 was used to conduct the statistical analyses, which included t-tests and regression models. Regarding the statistical power of the regression models for our sample size and the number of control variables, the rule of thumb is that there should be a minimum ratio of 30 observations for each variable. With our sample size of 1,028 observations, we have enough cases for the number of variables we use in the models. For further verification, we calculated the statistical power of our models using G*Power 3 software that is designed to do so.[22] The results showed that the fully adjusted regression models with the largest number of independent variables have the statistical power that is needed.

Results

Descriptive Statistics

The final study population consisted of 1,028 undergraduates at the University of Hawai'i. Overall, fifty-four percent were women (Table 1). Study participants self-identified as either Japanese (21%), White (19%), Filipino (16%), Native Hawaiian (14%), Chinese (10%), Other Asian (6%), Pacific Islander (4%), or Other Race (10%). The racial composition of the sample was commensurate with the university's diverse student body (Fall Semester 2012): Asian (40.4%), White (20.9%), Native Hawaiian or other Pacific Islander (17.4%), Other Race (18.2%). The one exception is that Asians were somewhat overrepresented in the sample: 53.0% versus 40.4%. Most students were born in the United States (14% immigrants) and the average duration of residence in Hawai'i was 13 years. The average level

Table 1. Descriptive Statistics: Percentages, Means, and Standard Deviations

Variables	n (%)	Mean	SD
Female	555 (54.0%)		
Race/Ethnicity			
White	195 (19.0%)		
Japanese	216 (21.0%)		
Filipino	164 (16.0%)		
Chinese	103 (10.0%)		
Other Asian	62 (6.0%)		
Native Hawaiian	144 (14.0%)		
Pacific Islander	41 (4.0%)		
Other race	103 (10.0%)		
Immigrant Status (Yes)	144 (14.0%)		
Identifies as local	668 (65.0%)		
Experienced lifetime discrimination	514 (50.0%)		
Age (years)		21.23	4.52
Years Living in Hawai'i		13.07	9.00
Parental education (years)		14.88	3.13
Everyday discrimination [range possible, 0 to 44]		12.04	8.16
Aloha spirit [range possible, 1 - 4]		3.41	0.64
Ethnic identity level [range possible, 0 – 3]		2.03	0.50
Psychological distress [range possible, 0 – 60]		13.28	10.12
Depression	339 (33.0%)		

N = 1,028. N (%), proportion; SD, standard deviation.

of parental education was more than high school (15 years) among these students with an average age of 21 years. Half of the students reported having experienced racial/ethnic discrimination in their lifetimes. The average score among students who reported experiencing everyday discrimination was 12 on a scale ranging from 0 to 44.

The average reported level of having learned the aloha spirit for the sample was relatively high (mean = 3.4; range 1–4) (Table 1). Furthermore, the level of learning the aloha spirit was highest among Native Hawaiians (mean = 3.8), which was significantly (t-tests, $P < .001$) different compared to all other racial/ethnic groups (Table 2). White students had fewer opportunities to learn the aloha spirit because they lived in Hawai'i for only 5 years on average, while Native Hawaiian students had an average of 19 years of residence, followed by Japanese (18 years), Filipinos (16 years), Chinese (15 years), Other Asians (14 years), Pacific Islanders (8 years), and Other Race (5 years). Supplementary analyses (not shown) indicated that those who lived in Hawai'i longer had significantly ($P < .001$) higher levels of having learned the aloha spirit and those who identified as local reported high levels of having learned the aloha spirit (3.6).

Table 2. Racial/Ethnic Differences in Learning the Aloha Spirit and Duration of Residence in Hawai'i

Race/Ethnicity	Aloha Spirit [range possible, 1-4]	Number of Years Living in Hawai'i
White	3.0	5
Japanese	3.5	18
Filipino	3.6	16
Chinese	3.3	15
Other Asian	3.4	14
Native Hawaiian	3.8	19
Pacific Islander	3.3	8
Other race	3.2	5

Table 3. OLS Regression Models of the Association Between Aloha Spirit and Levels of Psychological Distress

	Model 1 b (SE)	Model 2 b (SE)
Aloha spirit	-1.96*** (0.49)	-1.76** (0.54)
Lifetime discrimination		0.73 (0.65)
Everyday discrimination		0.41*** (0.04)
Female		1.56** (0.60)
Age		-0.08 (0.07)
Parental education		-0.18 (0.10)
Japanese[a]		0.02 (1.15)
Filipino[a]		0.87 (1.18)
Chinese[a]		-0.22 (1.33)
Other Asian[a]		2.07 (1.48)
Native Hawaiian[a]		1.08 (1.26)
Pacific Islander[a]		2.60 (1.62)
Other race[a]		0.68 (1.17)
Ethnic identity level		-1.51** (0.63)
Immigrant		2.41** (0.93)
Years in Hawai'i		0.11 (0.07)
Identifying as local		-1.16 (1.21)
Intercept	19.95***	18.98***

* $P < .05$; ** $P < .01$; *** $P < .001$ (two-tailed tests). SE, standard error.
[a]Reference category is White.

Ordinary Least Squares Regression Analyses for Psychological Distress

Table 3 presents two OLS regression models that examine the association between aloha spirit and levels of psychological distress. Model 1 (unadjusted model) shows that having learned the aloha spirit was associated with significantly lower levels of psychological distress ($P < .001$). The final multivariate model in Table 3 adjusts for additional risk factors: self-reported experiences of racial/ethnic discrimination in a lifetime, everyday discrimination not necessarily due to race/ethnicity, gender, age, parental education, race/ethnicity, levels of ethnic identification, immigrant status, years of residence in Hawai'i, and local identity. In this model, the strength of the statistically significant effect of aloha spirit decreased only slightly (b = -1.76; $P < .01$). Female gender ($P < .01$), everyday discrimination ($P < .001$), and being an immigrant ($P < .01$) were significantly associated with higher levels of distress. In contrast, higher levels of ethnic identification were linked with less distress ($P < .01$). Years of residence in Hawai'i ($P > .05$), local identity ($P > .05$), and race/ethnicity did not have significant mental health effects ($P > .05$).

Logistic Regression Analyses for Clinical Depression

Table 4 displays the unadjusted and fully adjusted logistic regression models that examine the association between aloha spirit and depression (>15 CES-D score cut-off as a proxy for clinical depression). Overall, aloha spirit has a protective effect on depression in the unadjusted (OR = 0.70; $P < .001$) and fully adjusted models (OR = 0.69; $P < .01$). Female gender (OR = 1.33, $P < .05$) and everyday discrimination (OR = 1.08, $P < .001$) were associated with higher odds of depression. Lifetime discrimination, age, parental education, race/ethnicity, ethnic identity level, immigrant status, years of residence in Hawai'i, and local identity were not significantly associated with depression ($P > .05$).

Discussion

To our knowledge, this study is the first to document a relationship between the aloha spirit and mental health. Our results reveal that stronger agreement with having learned the aloha spirit is associated with significantly lower levels of psychological distress and a reduced risk of depression among undergraduate students in Hawai'i. These statistically significant effects

Table 4. Logistic Regression Models of the Association between Aloha Spirit and Depression

	Model 1 OR (95% CI)	Model 2 OR (95% CI)
Aloha spirit	0.70*** (0.57-0.85)	0.69** (0.54-0.88)
Lifetime discrimination		1.03 (0.77-1.40)
Everyday discrimination		1.08*** (1.06-1.10)
Female		1.33* (1.00-1.76)
Age		1.00 (0.96-1.03)
Parental education		0.97 (0.93-1.01)
White[a]		0.72 (0.47-1.09)
Ethnic identity level		0.75 (0.56-1.00)
Immigrant		1.34 (0.90-2.02)
Years in Hawai'i		1.03 (0.99-1.06)
Identifying as local		0.70 (0.40-1.23)

* P < .05; ** P < .01; *** P <. 001 (two-tailed tests). OR, odds ratio; CI, confidence interval.
[a]Reference category is racial/ethnic minorities.

are over and above the effects of self-reported discrimination, local identity, levels of ethnic identification, race/ethnicity, immigrant status, duration of residence in Hawai'i, and other sociodemographic factors. These findings suggest that the aloha spirit could be a cultural resource that is beneficial to psychological well-being in Hawai'i— a place often referred to as the "Aloha state" and known for having better levels of well-being than most other states.[23]

Despite the relatively high levels of learning the aloha spirit reported by the students in the current study, everyday discrimination was associated with significantly elevated levels of psychological distress and a greater likelihood of depression. Moreover, everyday discrimination not necessarily due to race/ethnicity had a stronger association with symptoms of depression than having ever experienced racial/ethnic discrimination in a lifetime, which has been found among Asian Americans in prior studies.[12,24] The relationship between the chronic stress of everyday discrimination and symptoms of depression in Hawai'i has been documented previously in a study of Filipino Americans in Honolulu.[12] Another relevant study found that among a sample of 94 adult Native Hawaiians, perceived racism increased the likelihood of self-reported hypertension, adjusting for age, gender, education, and degree of Hawaiian and American cultural identities.[25] More research is necessary on racial/ethnic differences in the effects of discrimination on different physical and mental health outcomes in Hawai'i. Results of the present study also indicate that having a salient ethnic identity is associated with significantly lower levels of depressive symptoms, which is consistent with prior research on Filipinos in Hawai'i and California.[12] In other words, a stronger sense of ethnic pride and knowledge about one's ethnic group is related to better mental health.

Limitations of the present study are worth noting, such as the cross-sectional survey design (N = 1,028), which cannot determine the causal ordering of the relationships. It is possible that symptoms of depression could predispose these college students to perceive that they are being discriminated against. Yet, there is longitudinal evidence in the literature that prior experiences of discrimination predict subsequent symptoms of depression, regardless of earlier mental health problems.[11,26] Other limitations of this study are that self-reports were used and depression was the only mental illness measured. The self-reported symptoms of depression were not based on diagnosis, but a proxy was used for clinical depression using the cut-off for the CES-D and levels of psychological distress were examined. The CES-D is a screening measure not intended to be a diagnostic tool. Furthermore, the measure of the aloha spirit was a single question asking the degree to which the respondents strongly disagreed or agreed that they had learned it in Hawai'i. Thus, the aloha spirit was not defined in the survey and was open to the respondent's own interpretation. Our findings, however, suggest that this is a ripe area for future research. Qualitative research is especially needed to comprehensively define the different dimensions of the aloha spirit for each of the racial/ethnic groups in Hawai'i, ascertain how often it is practiced in daily life and whether certain aspects of it may be different than the commercialized renditions that the tourist industry exploits, and inquire whether the aloha spirit is a social-psychological resource for coping with stress. In essence, aloha is not simply a greeting used in Hawai'i. More research needs to uncover how it is a way of life that has implications for social relations, health, and well-being.

In conclusion, this study draws attention to the paradox of discrimination and the aloha spirit in Hawai'i by highlighting their distinct relationships with mental health. Overall, future research should expand the population of study beyond college students to other age groups, use a representative probability sample of the state of Hawai'i, assess temporal ordering using longitudinal data, and examine more mental health outcomes. This would bring us closer to establishing whether the high levels of psychological well-being in Hawai'i are due in part to the aloha spirit—a cultural asset that should no longer be overlooked by the research literatures in medicine and public health.

Conflict of Interest

None of the authors identify any conflict of interest.

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