

**It's Not Black and White:
Discrimination and Distress in Hawai'i**

Abstract

Objective: This study investigates whether the strength of the relationship between perceived discrimination and psychological distress varies by race/ethnicity, gender, and the number of years of residence in Hawai'i. **Method:** Our sample consisted of 1,036 undergraduate students at a university in Hawai'i and the survey was conducted in 2012-2013. The sample was composed of 55% females and the average age was 21. The students reported their racial/ethnic backgrounds as White (19%), Japanese (21%), Filipino (16%), Chinese (10%), Native Hawaiian (14%), Pacific Islander (4%), other Asian (6%), and other race/ethnicity (10%). **Results:** Interaction effect results revealed that Whites who had experienced everyday discrimination had higher levels of psychological distress than racial ethnic minorities. Females who had experienced everyday discrimination were more distressed than males and more distressed by a lower threshold level of discrimination. Furthermore, those who had lived in Hawai'i for a longer duration and experienced everyday discrimination were more distressed. **Conclusions:** Our findings draw attention to how the psychological effects of discrimination vary by racial/ethnic group, gender, and location in the United States. The relationship between everyday discrimination and higher levels of psychological distress especially among those who have lived in Hawai'i longer, females, and Whites indicates that targeted medical and social interventions are needed to protect the mental health of these college students. (215 words)

Keywords: discrimination; psychological distress; race/ethnicity; gender; Hawai'i.

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Studies on the relationship between perceived racial/ethnic discrimination and mental health problems in the United States have primarily focused on African Americans, Hispanics, and more recently Asian Americans (e.g., Gee, Spencer, Chen, Yip, & Takeuchi, 2007; Hwang & Goto, 2008; Mossakowski 2003, 2007; Yip, Gee, and Takeuchi, 2008; Yoo & Lee, 2005; Zhang, Hong, Takeuchi, & Mossakowski, 2012). It is not surprising that the large White population has often been excluded likely because of their historically privileged position in the American racial hierarchy. There is intriguing national evidence, however, which suggests that Whites who have experienced discrimination may be more psychologically distressed by it than racial/ethnic minorities (Kessler, Mickelson, & Williams, 1999; Pavalko, Mossakowski, & Hamilton, 2003). In the literature in general, little is known about how the mental health consequences of discrimination vary across racial/ethnic groups as well as places that have culturally diverse populations. Racial/ethnic groups with smaller populations, such as Pacific Islanders, continue to be relatively overlooked in this literature. Furthermore, what remains to be determined is the extent to which the psychological effects of discrimination vary by gender, stage in the life course, and the duration of residence in different locations in the United States. A location that is highly stratified by race/ethnicity and where Whites are not at the top of the racial hierarchy is Hawai'i.

Our study contributes to the literature by examining the racially and ethnically diverse, understudied location of Hawai'i. Moreover, the focus of our study is on college students most of whom are in a formative stage in the life course called emerging adulthood (Arnett, 2000).

For students, social relations are paramount during this life stage and experiences of discrimination can be especially harmful for their psychological well-being (Tummala-Narra & Claudius, 2013). It is important to study college students because it captures the transition to adulthood, a stage when the onset of symptoms of anxiety and depression are likely to manifest as psychological distress (Kessler et al., 2003). By advancing our understanding of the link between discrimination and psychological distress among college students, our study can help to shed light on the prevention of these symptoms from reaching levels of diagnosable anxiety and depressive disorders in adulthood. Overall, our study provides an evaluation of whether the strength of the relationship between perceived discrimination and psychological distress varies by gender, duration of residence in Hawai'i, and racial/ethnic group among college students.

Discrimination and Distress

Perceived discrimination has generally been measured as a self-report of unfair treatment in a lifetime due to race or ethnicity, and as different types of everyday experiences of unfair treatment, which could be due to race/ethnicity or other social statuses, such as age, gender, sexual orientation, and socioeconomic status. Perceived everyday discrimination has been conceptualized in terms of routine behaviors, such as receiving poorer service than others in restaurants and stores, being treated with less courtesy/respect, and being called names (Williams, Yu, Jackson, & Anderson, 1997;). Research indicates that everyday discrimination as a chronic stressor has a significantly more distressing effect among racial/ethnic minorities than a single incident of major racial/ethnic discrimination in a lifetime (Gee, 2002; Kessler et al., 1999; Mossakowski, 2003; Williams et al., 1997; Zhang et al., 2012).

Studies have shown that African Americans, Hispanics, and Asian Americans experience everyday discrimination (Alvarez, Juang, & Liang, 2006; Kessler et al., 1999; Williams et al., 1997; Zhang et al., 2012), but what about Whites? A national study by Kessler and colleagues (1999) revealed that more than half of non-Hispanic Whites (56%) had experienced everyday discrimination, compared to more than 90% of non-Hispanic Blacks. Almost one third of Whites reported major episodic experiences of discrimination in a lifetime, such as being denied a bank loan, scholarship, services, promotion, or a job and so forth, compared to almost half of Blacks (Kessler et al., 1999). Moreover, they found that these major types of discrimination were associated with significantly more psychological distress among Whites than among Blacks and other racial groups. Similarly, a study by Pavalko and colleagues (2003) using national longitudinal data on working women found that Whites were significantly more psychologically distressed than African Americans by previous experiences of work discrimination for any reason. These unexpected findings were not highlighted in these studies nor explained in detail.

One possible explanation is that Whites are not as accustomed to experiencing discrimination and when it happens to them, they may not be psychologically equipped to cope with it. Also, the discrimination that Whites experience in the United States may not necessarily be due to their race or ethnicity, but rather other social statuses. The two most common reasons for discrimination in the United States are the social statuses of race/ethnicity and gender (Kessler et al., 1999). Whites are less likely to report race/ethnicity as the reason for discrimination and more likely to report gender as the reason (Kessler et al., 1999).

Although gender differences have been consistently shown in mental health research, such as women having higher rates of depression and anxiety than men in general (Rosenfield & Smith, 2010), less is known about whether women are more psychologically distressed by

discrimination than men. Intersecting sexism and racism are known to be multiplicative factors of psychological distress especially for African American women (Crenshaw, 1989; Landrine, Klonoff, Alcaraz, Scott, & Wilkins, 1995; Moradi & Subich, 2003; Stevens-Watkins, Perry, Pullen, Jewell, & Oser, 2014). A study on African Americans in Detroit found that everyday discrimination was linked with significantly more symptoms of anxiety among women, while the effect was not statistically significant among men (Banks, Kohn-Wood, & Spencer, 2006). The researchers explained that women often ruminate about stressors and internalize the discrimination, such as wondering if they experienced unfair treatment due to their gender and/or race, perhaps exacerbating their anxiety about it (Banks, Kohn-Wood, & Spencer, 2006; Nolen-Hoeksema, 2004). This finding could also suggest that discrimination as a daily stressor may be appraised differently by women compared to men, leading to differential emotional reactivity and coping responses (Lazarus & Folkman, 1984). In contrast to women, men are more likely to externalize distress by engaging in substance abuse and dependence rather than internalize distress (Rusting & Nolen-Hoeksema, 1998). Another study discovered that Asian American women had more negative mental health outcomes when exposed to a lower threshold of discrimination than their male counterparts (Hahm, Ozonoff, Gaumond, & Sue, 2010). They found that women who had experienced medium and high levels of discrimination were more likely to have major depressive disorder. Men who had experienced medium levels of discrimination were not likely to be depressed, but men who had high levels of discrimination were more likely to be depressed (Hahm et al., 2010). Overall, more research is needed to investigate whether the mental health ramifications of discrimination differ not only by gender, but also by racial/ethnic group, life stage, and location in the United States.

Racism and Ethnicity in Hawai'i

An understudied location in the literature on discrimination and mental health is Hawai'i. Hawai'i is unique because it is the only state where non-Hispanic Whites are not the largest racial/ethnic group: Asians are the largest racial/ethnic group in Hawai'i (Pew Research Center, 2014). According to U.S. Census estimates (2013), the Hawai'i population of over 1.4 million has the following distribution: Asian alone 37.7%; White alone 26.6% (23.0% indicated non-Hispanic); Native Hawaiian and Other Pacific Islander alone 10%; Hispanic 9.8%; African American alone 2.3%; American Indian and Alaska Native alone 0.4%; and two or more races 23.1%. This demographic configuration is the result of a particular history of U.S. occupation and settlement in the Hawaiian Islands, the expansion of capitalist plantation agriculture, and labor migration. The racial/ethnic composition of the population and history of migration have propelled patterns of racism in Hawai'i (see Glenn, 2004; Rohrer, 2010).

The presence of Whites in Hawai'i is overwhelmingly linked to Anglo migration and settlement from the continental United States and the historical dispossession of Native Hawaiians through the overthrow of the Native Hawaiian Kingdom, land appropriation, and establishment of a White oligarchy and military ruling apparatus from the late nineteenth to late twentieth century (Kent, 1983; Rohrer, 2010; Silva, 2004). With the Anglo migration also came many diseases that decimated the indigenous population. The presence of Whites has been further identified with oppression of Asian immigrant laborers throughout the twentieth century (Glenn, 2004; Jung, 2006; Takaki, 1984). These are not simply past historical events, but rather they are connected to current configurations of racial demographics, racial stratification as well as socioeconomic and political power.

In Hawai‘i, Whites are uniquely low in the racial hierarchy because they are both understood by some to be agents of Native Hawaiian dispossession historically and by others to be non-local. The socioeconomic advantages many Whites enjoy may not protect them from stigmatization, because for some that advantage is linked to White privilege and racial inequality in Hawai‘i historically, while for others it is linked to conditions of growing wealth and income inequality, rising real estate prices, and gentrification. Thus, this distinct history and socioeconomic privilege converge to lead to feelings of resentment toward Whites. Whites are often called “haole” in the contemporary local vernacular in Hawai‘i. While there is some disagreement on the etymology of “haole” and its changing meanings from the Hawaiian language to Hawaiian Creole English (Rohrer, 2010), it has become a term used to refer to foreigners racialized as White and “is also a marker of a certain set of attitudes and beliefs that are distinctly not local” (Rohrer, 2010, p. 59). Whites can be racially marked as haole or foreigner no matter how long they have lived in Hawai‘i (Rohrer, 2010). Whether an individual is proud of his/her racial/ethnic group membership should also be taken into account in psychological studies of discrimination (Phinney, 1991). Research has shown that a strong sense of ethnic identity is linked with better mental health and may counteract the effects of racial/ethnic discrimination (Mossakowski, 2003).

The Present Study

To summarize, what warrants further inquiry in the literature in general is the extent to which the psychological effects of discrimination vary by minority groups (i.e., race/ethnicity and gender) and place. Accordingly, our study addresses an unanswered research question: Does the strength of the relationship between discrimination and psychological distress vary by

gender, race/ethnicity, and duration of residence in Hawai‘i? Based on the literature that we have discussed as well as the racial/ethnic composition and stratification of the population in Hawai‘i, we hypothesize that Whites, females, and those who have resided in Hawai‘i for more years of their lives will be more psychologically distressed by exposure to discrimination. We also hypothesize that females will be more distressed than males by a lower level of discrimination in their daily lives (Hahm et al., 2010).

Method

Participants

Participants consisted of 1,091 undergraduate students at a university in Hawai‘i. The final sample size was 1,036 after list-wise deletion of missing cases. The 55 students who were excluded were missing completely at random, according to supplementary logit analyses of missing data. Demographic characteristics of the final sample are presented in Table 1. The sample was composed of 55% females. The average age was 21 years with a minimum age of 17 and a maximum age of 70 (only one respondent was age 70 and 3.8% of the sample was older than age 30). Most of the sample can be considered young adults because it has been argued that young adulthood can extend beyond a person’s 20s, and the transition to adulthood may depend more on acquiring adult social roles than specific years of age (Arnett, 2000). These students reported their racial/ethnic background as White (19%), Japanese (21%), Filipino (16%), Chinese (10%), Native Hawaiian (14%), Pacific Islander (4%), other Asian (6%), and other race/ethnicity (10%). The racial composition of our sample generally reflected the university’s diverse student body (Fall Semester 2012): White (20.9%), Native Hawaiian or other Pacific Islander (17.4%), Asian (40.4%), Hispanic (2%), Black (1.5%), American Indian or Alaska

(0.3%), race/ethnicity unknown (0.2%), and two or more races (14.2%). Most students in our sample were born in the United States (14% immigrants) and the average duration of residence in Hawai‘i was 13 years. Those who had resided in Hawai‘i the longest on average were Native Hawaiians (18.8 years) and the Japanese (18.1 years) followed by Filipinos (15.9 years), the Chinese (15.3 years), other Asians (13.7 years), Pacific Islanders (8 years), other races (5 years), and Whites (5 years). Regarding socioeconomic status, the average level of parental education was more than high school (15 years).

Procedures

With professors' permission, students completed the 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 during 2012-2013. These were the larger courses that the professors agreed to have us conduct the survey and we wanted to branch out to other departments and schools at the university. The survey's procedures were approved by the university's Institutional Review Board. 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, confidential, and would not be compensated.

Measures

Dependent variable. The dependent variable was the complete 20-item Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D is a valid and reliable measure for adolescents and young adults to assess their symptoms of depression, also referred to as levels of psychological distress (Radloff, 1991), and the CES-D has been used for populations in

Hawai'i (Edman et al., 1998; McArdle et al., 2001; Prescott et al., 1998). Our survey respondents were asked about how they felt in the past week, such as how often they had crying spells, and felt sad or lonely. The four 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*. The scale was coded so that higher values signify higher levels of psychological distress. The scale was the summation of the items. We conducted factor analyses for the CES-D and decided not to use factor scores because the Cronbach's alpha for our sample was high (.90) using all 20 items, which suggested it is a reliable and valid scale for this population. The mean level of depressive symptoms was 13.3 for this scale ranging from 0 to 60, indicating that most of the college students were experiencing psychological distress but they were not necessarily clinically depressed (< 16) (Radloff, 1977, p. 393).

Independent variables. One of our focal independent variables was perceived lifetime discrimination. The students were asked: "Have you ever been treated unfairly or badly because of your race or ethnicity in your lifetime?" Half (51%) answered "yes." Our other focal independent variable was perceived everyday discrimination. The day-to-day experiences were captured in a 9-item scale (Williams et al., 1997). The students were asked to provide the frequency of several situations that happened to them: "You are treated with less courtesy than other people"; "you are treated with less respect than other people"; "you receive poorer service than other people at restaurants or stores"; "people act as if they think you are not smart;" "people act as if they are afraid of you"; "people act as if they think you are dishonest"; "people act as if they're better than you are"; "you are called names or insulted"; and "you are threatened or harassed." The 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. Higher scores indicated higher levels of everyday discrimination. The scale was created by summing the items (possible maximum value = 45). Missing values (17 observations) were mean (12.1) imputed. Supplementary analyses confirmed that the regression results were unchanged with and without mean imputation. The scale had high reliability (Cronbach's alpha = .89). Everyday discrimination was mean-centered in the regressions and for the interaction effects.

The other independent variables were used to measure sociodemographic characteristics and have been shown to be covariates with symptoms of depression: gender (female=1), nativity status (immigrant=1), age (continuous variable), the number of years in Hawai'i (a continuous variable, mean-centered for regressions), and parental education. Parental education is a commonly used indicator of socioeconomic status among students and young adults who are in the early stages of status attainment (Mossakowski, 2008). Parental education was measured by the highest level of schooling that the respondent's father or mother had achieved. Missing values were imputed using the following procedure for parental education: (1) missing values on father's education were substituted with mother's education and vice versa; and (2) remaining missing values (46 observations) were replaced with the mean. The regression results were consistent using mean imputation or list-wise deletion for parental education.

The race/ethnicity variables were created from nine categories for which the survey respondents could select: (1) White, Caucasian, Anglo, European American not Hispanic; (2) Asian; (3) Native Hawaiian; (4) Pacific Islander; (5) Black or African American; (6) Hispanic or Latino; (7) American Indian, Native American, or Alaska Native (8) Mixed, parents are from different racial/ethnic groups, and (9) Other. The respondents were asked to write more specific information for the categories Asian (write in Asian group), Pacific Islander (write in the island),

Mixed (write in racial/ethnic groups of parents), and other race/ethnicity. For the mixed race/ethnicity category, we selected the first race/ethnicity that was written by the respondent for the purpose of the current study with the exception of Native Hawaiian, which we coded as listed if at all. In sensitivity analyses, we controlled for mixed race/ethnicity in the regression models and the results did not substantively differ. Moreover, the effect of mixed race/ethnicity on psychological distress was not statistically significant so we chose to exclude it from the final regression models shown. For race/ethnicity, the dummy variables that were created included White, Japanese, Filipino, Chinese, Other Asian, Native Hawaiian, Pacific Islander, and Other Race/Ethnicity.

The self-assessed ethnic identity scale consisted of the average of 12 items (Phinney, 1991). According to Phinney (1991), ethnic identity is a continuum of behaviors, feelings, attitudes, and knowledge about one's racial/ethnic group membership. Research suggests that stronger levels of ethnic identification are associated with significantly lower levels of psychological distress among racial/ethnic minorities (Brittian et al., 2015; Lee, 2003; Mossakowski, 2003; Syed & Juang, 2014; Tummala-Narra & Claudius, 2013; Yip et al., 2008). Responses for ethnic-identity items ranged from *strongly disagree* (0) to *strongly agree* (3). Higher scores signified stronger levels of ethnic identification. We conducted factor analyses and decided not to use factor scores because the Cronbach's alpha (.89) indicated it was a reliable variable with excellent internal consistency using all of the items. We imputed missing cases (33 observations) with the mean value of the scale (2.03), and the regression results were consistent with and without mean imputation for ethnic identity.

Data Analysis

Table 1 shows the descriptive statistics, which include the means, standard deviations, and ranges for the variables, which were described previously in the method and measures sections. In Table 2, stepwise ordinary least squares (OLS) regression analyses predict distress and examine the influence of race/ethnicity and other sociodemographic factors (Model 1), two types of discrimination—lifetime and everyday—(Models 2 and 3) for comparison, and an interaction effect (everyday discrimination x female) to test our hypothesis that females will be more distressed by everyday discrimination (Model 4). Table 3 tests our next hypothesis by using female and male subsamples and separate regression models as well as examining medium and high levels of everyday discrimination compared to low levels to explore whether females are more distressed by lower levels of discrimination than males. Finally, Table 4 has 3 OLS regression models that investigate our hypotheses that the relationship between discrimination and distress will be stronger for those who are White and have resided in Hawai‘i for more years. For the purpose of our hypothesis pertaining to Whites, Table 4 has racial/ethnic minorities as the reference category and Model 1 shows the main effects. Regression Model 2 in Table 4 examines the first interaction effect (everyday discrimination x White). Model 3 examines the second interaction effect (everyday discrimination x years in Hawai‘i), which is mean centered, for our last hypothesis. Additionally, we calculated the statistical power of our models using G*Power 3 software and the results showed that the fully adjusted regression models with the largest number of independent variables have the statistical power that is needed.

Results

Figure 1 reveals differences in the reported levels of racial/ethnic discrimination experienced in a lifetime by students of different racial/ethnic backgrounds. More than half (58%) of Whites reported having experienced racial/ethnic discrimination in their lifetime, compared to 81% of the “other race/ethnicity” category (i.e., Hispanic followed by Black, Native

American or Alaska Native). According to t-tests, the relatively high level of discrimination among Whites was not significantly different from that of Native Hawaiians (51%) and Pacific Islanders (47%). However, Chinese (38%), Filipino (45%), Japanese (42%), and Other Asian (42%) students reported significantly lower levels of lifetime racial/ethnic discrimination than Whites. Figure 2 shows statistically significant differences in the average frequency levels of everyday discrimination for each racial/ethnic group with a possible range of 0 to 45. The “other race/ethnicity” (15.31) category followed by Pacific Islanders (14.64), Whites (13.81), Native Hawaiians (12.78), and Filipinos (12.17) reported experiencing elevated levels of everyday discrimination (not necessarily due to race/ethnicity). According to t-tests, these levels were not significantly different from each other. However, Japanese (10.10), Chinese (9.02), and other Asian (9.58) students reported significantly lower levels of everyday discrimination compared to Whites (13.81), Native Hawaiians (12.78), and Filipinos (12.17).

(Table 1 about here)

(Figure 1 about here)

(Figure 2 about here)

Table 2 displays the four ordinary least squares (OLS) regression models that examine the effects of racial/ethnic group, sociodemographic characteristics, and two types of discrimination on levels of psychological distress. According to Model 1, although there were no statistically significant racial/ethnic minority group differences in levels of psychological distress, a stronger sense of ethnic identity was associated with significantly lower levels of distress. In other words, having a strong sense of ethnic pride together with cultural knowledge and commitment to one’s ethnic group was linked with better psychological well-being.

Regarding the socioeconomic status of the college students, higher levels of parental education were associated with significantly lower levels of distress. Immigrant status was linked with significantly more symptoms of distress and these immigrants comprised not only international students but also those students who were not born in the United States, but possibly resided in Hawai'i before attending the university. According to Model 2, racial/ethnic discrimination in a lifetime was associated with significantly higher levels ($b = 3.15$; $\beta = .16$, $p < .001$) of distress, over and above all control variables. In Model 3, the effect of lifetime racial/ethnic discrimination was no longer statistically significant when everyday discrimination was included. Everyday discrimination demonstrated a robust association ($b = .41$; $\beta = .33$, $p < .001$) with higher levels of distress. These results suggest that the chronic stress of unfair treatment not necessarily due to race/ethnicity had a more powerful relationship with distress than the acute stress of having ever experienced racial/ethnic discrimination in a lifetime. Also, the R^2 in Model 3 indicates that 14% of the variation in distress was explained.

(Table 2 about here)

It is noteworthy that when everyday discrimination was introduced in Model 3 of Table 2, the effect of gender became statistically significant, revealing that females had significantly higher levels of distress than males. Interestingly, females reported a lower frequency of everyday discrimination compared to males, which is consistent with prior research (Kessler et al., 1999). To assess whether the psychologically distressing effect of everyday discrimination varied by gender an interaction effect was included in Model 4. As hypothesized, the interaction effect in Model 4 indicated that everyday discrimination was associated with significantly higher levels of distress among females than among males. To illustrate, we graphed the interaction

effect in Figure 3 by showing the predicted values or simple slopes of psychological distress by everyday discrimination, female, and male.

(Figure 3 about here)

Next, gender differences were explored further with two OLS regression models in Table 3, which compared the strength of the effects of low, medium, and high levels of everyday discrimination on psychological distress by examining females and males separately. Among females, medium levels of everyday discrimination were associated with significantly higher levels ($b = 3.04, p < .01$) of distress, while high levels of everyday discrimination were linked with significantly more distress ($b = 7.87, p < .001$). Among males, only high levels of everyday discrimination had a relationship with significantly more distress ($b = 4.53, p < .001$). Medium levels of everyday discrimination were not significantly associated with the mental health of males. To compare, the R^2 for the model for females is .12 and for males the R^2 is .14.

(Table 3 about here)

Finally, the OLS regression models and interaction effects in Table 4 evaluated our hypotheses that everyday discrimination would be associated with more symptoms of distress among those who had lived in Hawai'i for a longer duration and among Whites. The main effects were shown in Model 1 with racial/ethnic minorities as the reference group because of our hypothesis pertaining to Whites. As hypothesized, the significant interaction effect in Model 2 suggested that the distressing effect of everyday discrimination became intensified the more years the student had lived in Hawai'i. Furthermore, the significant interaction effect in Model 3 indicated that everyday discrimination was associated with significantly higher levels of distress among Whites than the other racial/ethnic groups. The interaction effect is depicted

graphically in Figure 4.

(Table 4 about here)

(Figure 4 about here)

Discussion

The main objective of our study was to investigate whether the strength of the relationship between discrimination and distress varies by race/ethnicity, gender, and duration of residence in Hawai‘i. Our study documented levels of discrimination among undergraduate students at a university in Hawai‘i—not only among racial/ethnic minorities but also among Whites. Our study found that more than half of (58%) of Whites reported having experienced racial/ethnic discrimination in their lifetime, compared to 81% of the “other race/ethnicity” category (i.e., Hispanic, African American, Native American, or other groups). Similarly a national study found that more than half (56%) of Whites had experienced discrimination, compared to more than 90% of African Americans (Kessler et al., 1999). We also found that the different Asian groups reported significantly lower levels of lifetime racial/ethnic discrimination than Whites in Hawai‘i. Whites reported similar levels of everyday discrimination as those in the “other race/ethnicity” category as well as Pacific Islanders, Native Hawaiians, and Filipinos, while Japanese, Chinese, and other Asian students reported significantly lower levels of everyday discrimination than Whites. These levels of discrimination in Hawai‘i could reflect the fact that the White population is not the statistical majority, Whites are not at the top of the racial hierarchy despite their socioeconomic advantages, and they are often referred to as haoles or foreigners (Rohrer, 2010). Research suggests that Whites in the United States in general are increasingly likely to identify themselves as victims of racial discrimination (Wilkins & Kaiser,

2014) and Whites may experience higher levels of psychological distress than Blacks when accounting for the stress of discrimination (Williams et al., 1997).

Our results indicated that there were no racial/ethnic differences in levels of psychological distress among college students in Hawai‘i, but discrimination had a relationship with significantly higher levels of psychological distress, controlling for race/ethnicity, ethnic identification, gender, age, immigrant status, socioeconomic status, and how long they had lived in Hawai‘i. Furthermore, our findings suggested that the chronic stress of everyday discrimination not necessarily due to race/ethnicity had a more powerful psychological impact than the acute stress of having ever experienced racial/ethnic discrimination in their lifetime. This is consistent with previous studies on African Americans, Hispanics, and Asian Americans (Gee, 2002; Kessler et al., 1999; Mossakowski, 2003; Williams et al., 1997; Zhang et al., 2012).

As hypothesized, our results also suggested that females were more distressed by everyday discrimination than males and more distressed by a lower threshold level of discrimination. This part of our study was inspired by Hahm and colleagues’ (2010) discovery that Asian American females had more negative mental health consequences when exposed to a lower threshold of discrimination than males. Taken together, these findings suggest that discrimination may be more psychologically distressing among females no matter how often they experienced it because of the intensity of racism and sexism occurring simultaneously as a stressful “double jeopardy” (Swim, Becker, Lee, & Pruitt, 2009, p. 153). Women may ruminate and worry constantly wondering if they experienced unfair treatment due to their gender and/or race (Banks et al., 2006). Future research should also investigate to what extent this holds for women of different racial/ethnic backgrounds and whether discrimination as a daily stressor may be appraised differently by females compared to males, leading to differential emotional

reactivity and levels of distress (Lazarus & Folkman, 1984). For example, masculine role norms could have restricted the emotionally expressed reaction to discrimination among males, which could explain why they may have appeared to be less distressed by certain levels of it (Hammond, 2010). According to Hammond (2012, p. S232), “traditional masculine role norms prescribe emotion restriction and self-reliance as appropriate male stress responses (e.g., ‘boys don’t cry’ and ‘take it like a man’)...” Rather than internalizing the discrimination as symptoms of depression like females, the males could have externalized their distress via substance abuse (Rosenfield & Smith, 2010). A limitation of the current study is that other mental health outcomes were not measured in the survey, such as externalized substance use disorders and internalized anxiety disorder (Rosenfield & Smith, 2010). More studies should examine the effects of gendered racism on different mental health outcomes (Stevens-Watkins et al., 2014).

Another key interaction effect finding in our study that adds to the literature is that those who had lived in Hawai‘i for more years had significantly higher levels of distress associated with their experiences of everyday discrimination. This could mean that the chronic stress of unfair treatment was stronger for those who had been living in Hawai‘i for longer periods than for those who had recently moved to Hawai‘i. This could also indicate that the social context of Hawai‘i exposed these college students to the cumulative adversity of everyday discrimination at a vulnerable stage in the life course for mental illness (Turner & Lloyd, 1995). The extent of the mental health implications of living in a social context with high exposure to daily discrimination for a longer duration in particular regions of the United States and for different racial/ethnic groups needs more research attention. A relevant study by Gee and colleagues (2006) found that there was a significant relationship between everyday discrimination and risk of health problems among Filipinos in Honolulu, Hawai‘i, but not for Filipinos in San Francisco, California. Future

research needs to further examine how and why geographical location matters for understanding the health consequences of discrimination for different racial/ethnic groups.

Finally, our other significant interaction effect revealed that Whites who had experienced everyday discrimination had higher levels of psychological distress than racial ethnic minorities in Hawai‘i. Other national studies have provided evidence which suggests that Whites are more distressed by discrimination than African Americans (Kessler et al., 1999; Pavalko et al., 2003). While racial socialization and the development of explicit coping strategies have long been a part of African American communities in the United States because of historical and ongoing pervasiveness of anti-Black racism (Hughes et al., 2006; Shorter-Gooden, 2004; Ward, 1991), Whites may not have had to develop these coping strategies and may therefore be less likely to be psychologically equipped to cope with the stress of discrimination. Other health outcomes should also be examined. For example, Fuller-Rowell, Doan, and Eccles’ (2012) study on the stress hormone cortisol found that perceived discrimination was associated with a less healthy diurnal cortisol slope among Whites, but there was a healthier diurnal cortisol slope among African Americans. Moreover, future research on stress and health should examine the effects of group density or minority status and whether Whites as a smaller group in a “dissonant context must contend with the triple burdens of increased contact with prejudice, confused identity, and reduced support” (Halpern, 1993, p. 600).

The results from our study sample (N = 1,036) of students at a university in Hawai‘i are informative for future research and our sample’s sociodemographic characteristics were quite commensurate with the university population. Like the majority of studies in the literature, our survey data were cross-sectional so the causal ordering of the relationship between discrimination and distress cannot be disentangled. It is possible that those who were already

suffering from distress or depression could have been more likely to believe that they were experiencing unfair treatment or actually experience discrimination because of their symptoms. There could also be other factors that were causing their symptoms and discrimination that were beyond the scope of this study. However, there is national longitudinal evidence which demonstrates that prior self-reported experiences of discrimination are linked with subsequent mental health problems, regardless of earlier mental health (Brown et al., 2000; Pavalko et al., 2003). Future survey research should include questions asking whether the respondent experienced psychological distress because of discrimination or vice versa. The literature in general would benefit from more national longitudinal surveys as well as probability surveys that investigate Hawai'i and other culturally diverse regions of the United States. Like other surveys, our findings are limited by the use of self-reports for mental health and discrimination, and thus we cannot confirm if they accurately reflect what was actually experienced. Also, given the number of tests of significance that were conducted in our study, one limitation is the possibility of Type I errors with the alpha set at .05 for all tests. However, there were clearly more statistically significant findings by chance at the .05 level, and we were also concerned more about making Type II errors given the under-researched sample.

Another limitation of our study and the lifetime discrimination measure commonly used in the literature is that it does not specify where or when the unfair treatment was experienced. Therefore, we do not know how much of the lifetime racial/ethnic discrimination occurred in Hawai'i for those who migrated. Yet, we did find a high frequency of discrimination which they reported to have occurred in their day-to-day lives and likely when they were residing in Hawai'i. We also do not know the source of the discrimination, such as peers at school, adults, or members of specific racial/ethnic groups, which few studies have explored (Tummala-Narra

& Claudius, 2013). More studies should identify where the discriminatory experience occurred, why, and when, to better guide public health interventions and illuminate the social context (i.e., school or neighborhood) (Gee, Walsemann, & Brondolo, 2012). Few studies have examined the mental health consequences of discrimination in school contexts (Tummala-Narra & Claudius, 2013) and among Pacific Islanders in general (Kaholokula et al., 2012).

In conclusion, evidence from our study and other research suggests that discrimination could be a public health problem in Hawai‘i (Kaholokula, 2016; Kaholokula et al., 2012). Our discovery of a relationship between everyday discrimination and psychological distress especially among those who have lived in Hawai‘i longer, females, and Whites indicates that targeted medical and social interventions are needed to protect the mental health of these college students. Their experiences of unfair treatment could have far-reaching effects by psychologically influencing who they become as adults, and ultimately how they learn to treat others in our society.

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