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Project Title: Impacts of Social Proximity to Bias Crime among Compact of Free Association (COFA)-migrants in Hawaii
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Bias crime laws have been a feature of American law since the late 1980s, with the federal government passing multiple pieces of legislation related to bias crimes since the early 1990s. Defined differently in various jurisdictions, bias crimes are defined by the Federal Bureau of Investigation (FBI, 2015) as “criminal offense against a person or property motivated in whole or in part by an offender’s bias against a race, religion, disability, sexual orientation, ethnicity, gender, or gender identity.” The passage of these laws as a separate category of crime is/was premised in part on the fact that bias crimes create not only harms to the direct victim of the incident, but to the community that the victim belonged to as well. Bias crimes have been called “message crimes” because they communicate a devaluation of certain minority identities in society as though they are ‘acceptable’ targets for violence, deserving of the harms that are done to them, and are “less than” majority culture or identities in some way. In this regard, bias crimes convey messages that reiterate group differences (“us” and “them”), that devalue certain identities (e.g., being gay or lesbian), or that tell an entire group that they do not belong and are unwanted (e.g., immigrants). Despite these assumptions of a radiating or diffusing sense of terror resulting from bias crime victimization in that victim’s community, this feature of bias crimes has been infrequently studied.

A few key studies have tried to identify how the “message” being conveyed by bias crimes diffused to others who share a similar identity. In one of the few studies to specifically ask about the ways that community members are impacted by bias crimes by asking potential targets of violence, Perry and Alvi (2011) asked community members about their responses to a vignette about a person whom they have a shared group identity being the target of a bias crime. They demonstrated that when people perceive an in-group member being targeted for a bias crime, they report increased shock, fear, anger, fear, vulnerability, inferiority, and a
reinforcement of their identity being “not normal,” which Perry and Alvi call in terrorem effects. Respondents also reported behavioral changes, such as limiting which neighborhoods they go to, or not going out alone. The focus group members also reported feelings of being unwelcome, disruptions in expectations of harmony, community and inclusion, and becoming more fearful of people who shared the perpetrator’s identity, among others.

Limited studies of the impacts of bias-motivated crimes against immigrants or the children of immigrants have shown patterns similar to studies of other vulnerable communities. For example, a study of first generation (immigrants) and second generation (children of immigrants) people in Sweden (Andersson & Mellgren, in press) found that those who had been the victims of bias crimes were more likely to express fear for their safety. Studies on non-immigrant groups suggest that bias crimes can weaken connections to the identity that is being targeted (Perry & Alvi, 2011; Perry, 2014; Herek, 1999; Noelle, 2002), which could potentially further weaken an immigrant community’s bonds, making the impact of a bias crime worse for their community development. However, few studies have examined the impact of bias crimes in immigrant communities, how bias impacts their own community identity, and their adaptation to U.S. culture in the face of such bias-motivated hostility saying they “don’t belong.”

**Context of Bias Against COFA-Migrants**

According to the 2010 Census, there are over 147,000 people in the US who identified themselves as being Micronesian in whole or part, and the fastest growing Native Hawaiian and Pacific Islander group in the U.S. are Chuukese people (Hixson, Hepler, & Kim, 2012). Most Americans are unaware of the unique relationship that the US has with nations from the Micronesian region in the Pacific. Following WWII the United States became a protectorate for many Pacific Island nations because of continued interest in a military presence, and an interest
in testing nuclear weapons. Once these nations gained independence in the 1970-90s, the interest in strategic military presence had not declined, though the bombings had halted with hundreds of thousands of people exposed to lethal and/or toxic levels of nuclear radiation. To honor the damage done to their homeland and in exchange for continued exclusive control of Micronesians’ lands and waters for military purposes, the United States entered into a treaty called the Compact of Free Association (COFA) with three nations: 1) the Federated States of Micronesia (FSM; includes Yap, Pohnpei, Kosrae, and Chu’uk), 2) Republic of the Marshall Islands (RMI), and 3) the Republic of Palau. This treaty highlighted the responsibilities of the United States to help develop the health, welfare, and educational infrastructure of these COFA nations, and clarified the rights of COFA citizens to immigrate to the United States as “non-citizen residents.” Thus, unlike other immigrant groups, Micronesian immigrant populations who come to the United States do not face the conflation of “immigrant” with “illegal immigrant” that some other immigrant groups in the US face.

**COFA-migrants in a Hawaii Context**

Many anecdotal sources have highlighted the racism and anti-immigrant sentiment faced by Micronesian peoples. The *Hawaiian Independent* documented racist jokes told on a popular local radio station, *Al Jazeera* documented graffiti on the side of a Micronesian market to “Return my tax dollars,” and the Honolulu *Civil Beat* documented Nia Aitato’s experiences. A woman of mixed Pacific Islander backgrounds (Hawaiian, Yapese, and Samoan) who grew up in Kosrae said that when she wears “local,” business clothes people treat her with respect, but when she wears her traditional Micronesian flowing skirt in vivid colors: “It’s like I put on a target. People treat me differently.” This stigma is not confined to any one educational or economic group; a medical student in Hawaii reported that an attending physician said “We shoulda just
wiped the islands [of Micronesia] off the earth when we had the chance” (Yamada, 2010, p. 56). While systematic research has not been conducted, there have been reports of discrimination in education, housing, healthcare, and social services (Hofschneider, 2011).

**Purpose**

The few studies that have examined these community diffusion effects of bias crimes have had small sample sizes and limited sampling methodologies (e.g., Perry & Alvi, 2012; Benier, 2017; Bell & Perry, 2012), suggesting more rigorous study is needed in this area. To address this significant gap in the literature and to increase our understanding of the effects of bias crime, the PURPOSE of this study is twofold, first, to better understand the nature of bias crimes’ impacts on communities beyond the immediate target of victimization and second, how bias crimes can impact the progress of immigrants in particular to adapt to their new host culture.

To achieve this purpose, this project has three goals:

**Goal 1**: To determine the prevalence of bias crimes against COFA-migrants in Hawaii.

**Question 1**: What is the prevalence of bias crimes, including physical assaults, sexual assaults, robbery/theft, property damage, intimidation, or verbal harassment against COFA-migrants (those from the Micronesian region)?

**Hypothesis 1**: Based on prior studies of other vulnerable groups in Hawaii (e.g., Stotzer & Hollis, 2013) we hypothesize that 30% of Micronesian people will report being the victims of bias crime.

**Goal 2**: To determine the diffusion effects of bias crime victimization in regard to psychological, social, and safety consequences based on social proximity to bias crime along three categories: a) COFA-migrants who have been directly victimized, b) COFA-migrants who have not been directly victimized but have an intimate acquaintance they know was
victimized (proximal victims), and c) COFA-migrants who have not been the direct target or
known someone personally who has been the victim of a bias crime (distant victims).

**Question 2:** Does social proximity to a bias crime victimization incident in the
Micronesian community relate to the psychological and community sequelae in the
following 12 months, reflecting a “diffusion” or “ripple” effect of victimization in a
targeted community.

**Hypotheses 2a:** The direct victims of bias crime will show the greatest levels of
negative psychological sequelae, followed by those who are proximal victims, with
distant victims demonstrating the lowest levels of negative psychological and
community sequelae.

**Hypothesis 2b:** The direct victims of bias crime will show the greatest levels of
negative community sequelae, followed by those who are proximal victims, with distant
victims demonstrating the lowest levels of negative psychological and community
sequelae, while controlling for social proximity, including psychological resilience,
social support, as well as prior experiences of discrimination in employment, healthcare
or public accommodations.

**Hypothesis 2c:** The direct victims of bias crime will show the greatest levels of
negative safety sequelae, followed by those who are proximal victims, with distant
victims demonstrating the lowest levels of negative psychological and community
sequelae.

**Goal 3:** To determine how the negative impacts of bias crime (including consequences to
psychological well-being, feelings of safety, and sense of community) impact the adaptation
of COFA-migrants to living in Hawaii.
**Question 3**: When controlling for protecting factors (such as psychological resilience and social support) and other negative experiences in Hawaii (such as experiences of discrimination against Micronesian people), how do psychological, community, and safety sequelae impact the ability of COFA-migrants to adapt to life in Hawaii and develop feelings of belonging to their new host community?

**Question 3b**: Given these relationships, how does social proximity to bias crimes moderate these relationships and pathways?

**Hypothesis 1**: Higher levels of negative psychological, community, and safety sequelae will result in lower scores in adaptation to culture in Hawaii, when controlling for experiences of discrimination, psychological resistance, and social support.

**Hypothesis 2**: The different levels of social proximity (direct, proximal, or distant victims) will moderate the pathways by which COFA-migrants experience their adaptation to life in Hawaii and develop a sense of belonging.

**Project Design/Methods**

To address the three goals of this project, a collaboration was developed between University of Hawai‘i at Mānoa and We Are Oceania, a well-respected local Micronesian-serving community organization. An in-person interview was designed with the assistance of cultural experts and bias crime experts to test the factors associated with acculturation and the impact of experiencing bias crimes, or knowing of people within one’s group who experienced bias crimes, on that process. This project examined bias crimes among the COFA-migrant community using a respondent-driven sampling (RDS) sampling methodology to recruit participants for an in-person interview to help us better understand the community impact of bias crimes on vulnerable migrant/immigrant communities.

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Preparation

Previously validated scales were gathered and compared, with cultural experts weighing in on which may yield the best results for Micronesian populations and have the simplicity needed for translation. For example, cultural experts identified depression inventories that utilized terms like “feeling blue” do not translate well, and would be confusing to people for whom English is a second language. The original intent in this phase was to translate all materials so that the previously validated scales could be psychometrically tested, but cultural experts informed researchers that there were no consistent language conventions for spelling of words for many dialects, and that regional and island differences in language would render any single language translation of limited use. For example, trying to translate something into Chuukese alone could have meant six or seven variations based on regional language usage, whether someone was from “the lagoon” or outer islands, etc. Thus, when needed, skilled interpreters were recommended instead.

Consistent with an RDS methodology, seven initial participants (two in Hilo and five in Oahu), referred to as seeds, were selected by recommendations by cultural experts. Interviewers who spoke English and one other language from the Micronesian region were hired into the project to better facilitate the variety of language proficiencies of potential participants. Because of this bilingual requirement, all interviewers were from the Micronesian themselves, since few non-Micronesians speak a Micronesian language. These interviewers were trained in the study protocols and served as our initial pilot testers of the survey items at an initial four hour training session before the study commenced. Based on their feedback, subsequent revisions were made and the study materials finalized.

Protocols
Seven initial seeds who had been recommended by cultural experts were selected. Recommendation for seed selection is so to find community members who are well connected, influential, and who may tap into various portions of a population. Thus, we selected three Chuukese, two Marshallese, and two seeds from other less populous groups. Three were men and four were women. Ages and location in life varied from a young adult college student, a middle aged man who worked at one of consulates, and an older woman seen as a community elder.

One out of the seven initial seeds were successful in recruiting more than three waves of participants. Unfortunately, the Thanksgiving and Christmas holidays fell in the middle of the first attempt at generating recruitment chains, causing them to be short and not terribly fruitful. To recruit more participants, five additional seeds (one in Hilo and four in Oahu) were started after the new year based on recommendations from key stakeholders in the community. The mix of seed demographics were similar to the first round of seeds. The recruiting process remained the same for the duration of the project until 537 participants were recruited.

After the interview was completed, participants were directed to the cash monitor who gave them three referral coupons to recruit the next wave of possible participants and a $25 gift card incentive for their participation in the study. Participants received an additional $10 gift card for each participant they recruited up to three. Incentive and contact information was printed on the coupons so that recruits could set up an appointment to be interviewed. The process continued for every participant and recruit until the chain ended naturally.

Interviewers hired for the project conducted the interviewers at a mix of locations selected based on the guidance from cultural experts. These included at locations where people from the Micronesian region were more densely housed (including in the vicinity of some public housing communities), churches, and community centers. The mutually agreeable place to meet
was negotiated at the time that an appointment was made. On the coupon were also directions to call We Are Oceania if a person who received a coupon but could needed language assistance. We Are Oceania staff would be identified who could help coordinate the appointment and which interviewer to send to the interview. A discrete location within those areas was selected that allowed the interviewer and participant to have a reasonable level of privacy and quiet. Interviewers utilized tablets with the survey electronically loaded into Qualtrics and read questions aloud, or read along with participants (if seeing the words helped them with their English language comprehension). Due to issues with translation previously identified, interviewers themselves provided English language assistance, or interpretation, and only in the case of a handful of Marshallese respondents was a volunteer interpreter utilized in addition to the interviewer. Participant’s responses were recorded on each tablet device until the end of the day (in the case of multiple interviews in one day) and then connected back to the internet and removed from local storage into the project’s storage within Qualtrics.

**Measures**

In addition to demographics and bias crime and discrimination experiences, a variety of measures were utilized in the study falling under three broad categories consistent with the goals of the study: community factors, psychological factors, and community factors, and safety factors.

**Community Factors**

*Sociocultural Adaptation:* from Searle & Ward (1990) which was originally tested on Malaysian and Singaporean students in New Zealand. The original scale had 41 items, however, four were removed that pertained to student status (e.g., “coping with academic work,” “dealing with foreign staff at the university”) since this study did not target a student population. Another
that was not university-specific but was unclear ("Adapting to local accommodation"), particularly for a population whose first language is not English, was removed. One question about expectations was modified from "Understanding what is required of you at university" to "Understanding what is required of you at work or school." A second question, "Getting used to the population density" was changed to "Getting used to how many people there are" to accommodate non-native English speaking participants. These changes did not negatively impact the psychometrics of this scale, and it had an overall $\chi^2 = 0.968$.

*Sense of Community*: Two subscales from the Sense of Community Index 2 (SCI-2; Chavis, Lee, & Acosta, 2008) was utilized in this study. The original 24 item scale had four subscales, Reinforcement of Needs, Membership, Influence, and Shared Emotional Connections subscales. For the purposes of this study, the Reinforcement of Needs and Shared Emotional Connection subscales were utilized. In the scale, participants have a community identified for them, and then are asked a series of statements (such as "I get important needs of mine met because I am part of this community") and were asked how much they agree with each statement.

However, because people from the Micronesian region have a specific ethnic identity (e.g., Chuukese) as well as being classes in the US as "Micronesian" more generally, AND are embedded in the local community in Hawai‘i, the scale was implemented three times to capture data about each of these communities. Reliability analysis shows good psychometrics for each version of the scale:

- Reinforcement of Needs in Ethnic Community: $\chi^2 = 0.859$
- Shared Emotional Connection in Ethnic Community: $\chi^2 = 0.895$
- Reinforcement of Needs in Micronesian Community: $\chi^2 = 0.865$
- Shared Emotional Connection in Micronesian Community: $\chi^2 = 0.892$
- Reinforcement of Needs in Hawai‘i’s Local Community: $\chi^2 = 0.875$
- Shared Emotional Connection in Hawai‘i’s Local Community: $\chi^2 = 0.920$
An error was introduced into the interview in the “Shared Emotional Connection in Hawai’i” subscale, which has only five items instead of the full six. Despite this technical problem, the subscale still shows good reliability.

**Colonial Mentality Scale:** The 52 items were found to load onto five separate factors, including within-group discrimination (11 items), physical characteristics (8 items), colonial debt (7 items), cultural shame and embarrassment (5 items), and internalized cultural/ethnic inferiority (5 items). Of these five subscales, the cultural shame and embarrassment items and the internalized cultural/ethnic inferiority questions were adapted for Micronesian community members (by changing the word “Filipino” to “Micronesian”). All five of the items from the cultural shame and embarrassment items were included, but only three from the internalized cultural/ethnic inferiority subscale were included. Cultural experts argued that two of the items that asked participants to compare their culture to White culture (e.g., “I feel that being a person of my ethnic/cultural background is not as good as being White”) did not carry the same meaning of cultural context for Micronesian people as it did for Filipino people, and thus were excluded. The cultural shame subscale had good reliability (Alpha = 0.778) as did the three items from the cultural/ethnic inferiority subscale (alpha = 0.811). Overall, all eight items also showed good reliability with $\chi^2 = 0.832$.

**Psychological Sequelae**

**Psychological Resilience:** The six-item Brief Resilience Scale (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008) was utilized in this study. Three of the items are positively valenced and three are negative, necessitating recoding those three items in order to compute a mean score for the six items on their scale of 1-5 (1 = strongly disagree to 5 = strongly agree in this study). While this study has shown good psychometrics among college...
students, cardiac rehabilitation patients, and women with fibromyalgia or healthy controls, among the Micronesian participants in this study the Chronbach’s alpha was only 0.258. The original scores from participants were retained, and reverse coded variable created separately, in order for other researchers to explore the pattern of responses at a future time. Given the poor reliability of this scale among Micronesian respondents, future researchers should be cautious of using any of these items or the composite score in this dataset in future analyses. A more suitable resilience scale may also need to be developed for this population in future studies.

**Social Support**: From Zimet, Dahlem, Zimet, and Farley (1988), a 12 item scale to measure social support. The scale was originally on a scale of 1-7 (1 being “very strongly Disagree” to 7 “very strongly agree”) but was converted to a five point scale, 1-5, with 1 being “strongly disagree” to 5 “strongly agree” to be on a consistent scoring metric as other scales in the survey. The items showed good overall reliability, with $\chi^2 = 0.951$.

**World Assumption Scale**: Originally, a scale to measure the impacts on our assumptions of how the world “works” and how that may be impacted by trauma (Janoff-Bulman, 1989), which has been subsequently adapted and modified in many ways (van Bruggen et al., 2018). There are multiple possible version with up to eight subscales (Benevolence of the Impersonal World, Benevolence of People, Justice, Controllability, Randomness, Self-worth, Self-controllability, and Luck), each with four items scored on a scale of 1-5 (strongly disagree to agree). For this study, three subscales were utilized, the Justice, Benevolence of People, and Benevolence of the World Subscales. The Justice and Benevolence of the World Subscales had four items each and no items that needed reverse coding, but the Benevolence of People Subscale also had four items but two that needed reverse coding. The Justice Subscale ($\chi^2 = 0.924$), and Benevolent World Subscale ($\chi^2 = 0.758$) showed adequate reliability, but the Benevolence of
People Subscale had highly problematic reliability ($\chi^2 = -0.398$). Similar to the issues in the Psychological Resilience scale discussed above, there may have been issues in interpretation or in understanding similarly worded questions that may challenge people for whom English is not their first language, may have been an error in interpretation, or other measurement error. Both the original responses of the participants and a separated reverse-coded dummy variable are included in the dataset to promote more analysis into this area to better understand why this scale was not effective in measuring a sense of a benevolent world among Micronesian respondents.

**Depression:** The Center for Epidemiologic Studies Short Depression Scale (CES-D 10) (Radloff, 1977) was utilized in this study. It is a 10 item short depression scale that measures frequency of some behaviors in the past week from “rarely or none of the time (less than one day)” to “all of the time (5-7 days)”. Scores are totaled and as per the scoring instructions, any participants who had more than two missing responses from any of the ten items had their total score entered as missing (9999). The scoring suggests that those who score 10 or higher may meet criteria for depression. The scale showed good reliability with $\chi^2$ at 0.801.

**Anxiety:** The Generalized Anxiety Disorder Scale (GAD-7) has seven items related to frequency (from “not at all” to “nearly every day”) of anxiety symptoms, and an eighth item used to assess how much symptoms impacted daily life (Spitzer, Kroenke, Williams, & Löwe, 2006). The seven frequency items showed good reliability, with a $\chi^2$ of 0.948.

**Safety Sequelae**

**Feelings of Safety:** This scale is comprised of three related questions used since the 1980s (Taylor, Gottfredson, & Bower, 1984) in various studies and national data collection efforts to determine a sense of overall safety. Participants responded to their ratings of safety from “very safe” to “very unsafe” on a five point scale. The three items showed good reliability ($\chi^2 = 0.85$).
**Fear of Crime:** This study utilized the two questions from the European Social Survey (2006) that asked about the frequency of worrying about being the victim of a burglary or a violent crime in the home. The ESS also asks about how seriously these concerns impact daily life, but we did not utilize those questions. Participants responded about frequencies of worry on a five point scale from “never” to “all or most of the time”. The scale showed good reliability at $\chi^2 = 0.889$.

**Trust in Police:** This study used four questions first developed by Stoutland (2001) and then tested by Flexon, et al. (2009) capturing four dimensions – priorities, respectfulness, dependability, and competence. Participants are asked to what degree they agree with four statements on a scale of 1-5 from “strongly disagree” to “strongly agree.” The Trust in Police scale showed good scale reliability ($\chi^2 = 0.93$).

**Bias Crime and Discrimination Experiences**

**Discrimination:** Specific discrimination items were selected based on anecdotal reports of issues that had arisen for the Micronesian community, including being evicted unfairly, being denied medical treatment, and harassment on public transportation. Cultural experts requested that these items be included (see Table 1). All questions asked about a specific type of discrimination, and respondents replied “yes” or “no” to whether or not they had experienced such treatment. Although other areas of discrimination had been reported (such as in the education system), public accommodation, housing, and work-related discrimination seemed to the most relevant to the purpose of this study.

**Bias Crime Victim Status:** Identifying bias crime victimization and diffusion is a multi-step process. First, respondents were asked if they had ever been a victim of a crime at all in Hawaii. For those who replied that they were crime victims, they were asked a follow up
question asking whether they felt that any crime experience was due to the fact that they were Micronesian. The term “bias crime” was never used because most Micronesian migrants are unlikely to know what a bias or hate crime is, since they are not a feature of the law throughout most of the Pacific.

Regardless of their answer to being a crime victim themselves, all participants were asked if they knew a “close” other who had been the victim of a crime due to being Micronesian, and then a second question asking if they knew of these types of crimes happening in their community. These three questions were then examined to create the “bias crime victim status” variable. Anyone who said they had been a victim of bias crime themselves were categorized as a “direct” victim, while those who had not been direct victims themselves but knew a close other were coded as “proximal” victims. Those who reported no direct victimization and no proximal victimization but reported that they know if bias crimes in their community were coded as “distant” bias crime victims. Anyone who reported no direct, proximal, or distance victimization were coded as “not a reported victim.” Conceptualizing victimization along a continuum based on how close to a direct victim on is has been utilized successfully by other researchers (e.g., Paterson et al., 2018; Paterson, Brown, & Walters, 2018).

Data Analysis/Findings

The total number of participants was 537. However, in RDS methodology, chains that do not make it to the third wave are considered “unproductive seeds” and cannot be used in the analysis. Three duplicate records and 17 subjects from 4 seeds (extreme small sample size for RDS design) were excluded from the dataset and analysis. Thus, there were a total of 517 respondents with usable data. There were 298 female and 215 male participants. There were four people who did not report their sex as either female or male. The three largest groups of
participants were Chuukese (173, 34.1%), Marshallese (121, 23.8%), and Pohnpeian = (192, 37.8%). This mix of ethnicities does not match current population estimates for Micronesians in Hawai‘i, where Marshallese are the most numerous by far, followed by Chuukese, then all others.

Psychometrics were run on all scaled items, and found that even with translation across multiple languages, the majority of scales utilized in the study retained sufficient reliability (alphas over 0.6) with the exception of the psychological resilience scale and the Benevolence of People subscale in the World Assumptions scale. We are still exploring a variety of analyses to determine what was compromised in those scales and why they did not work for this population. All other scales appeared psychometrically sound.

Checks on the overall success of the RDS methodology are also favorable, showing good convergence at an early stage that is stable for most of the sample. Plot 1 shows the recruitment tree for six seeds. The largest two seeds have the sample sizes of 155 (30%) and 181 (35%). The sample sizes for the other four seeds are 77 (14.9%), 59 (11.4%), 36 (7.0%), and 9 (1.7%). Graphical methods (recruitment by wave, convergency plots by main outcome variables and bottleneck plots) were used to examined the success of the RDS methodology. The highest recruitment rates are between wave 3 and 7 with peak at wave 4, each wave has a recruitment of over 50 subjects. Convergency plots shows stable rate of key outcome variables when the total sample size reached 100, the result is also supported by Bottleneck plots.

Goal 1: To determine the prevalence of bias crimes against COFA-migrants in Hawaii.

We hypothesized that roughly 30% of Micronesian respondents would report being the direct victims of bias crime. This hypothesis was not confirmed, as there were a relatively low number of respondents who reported that they were victims of bias crime because they were
Micronesian (direct victim \( n = 22 \), or 4.6% of those who responded to this question), who knew someone close to them (proximal victim \( n = 40 \), 8.3% of those who responded) or knew of the events happening in their community but did not know anyone personally (distant victim \( n = 18 \), 3.7% of those who responded to this item) compared to those who claimed to not know anyone or had not heard of it happening (non-bias crime victim \( n = 403 \), 83.4% of those who responded to any of these items). This low level of reported experiences (see Table 1) may be due to the fact that relatively few of the participants reported being victims of crime at all (\( n = 39 \)) and the fact that Hawaii is a relatively low crime-rate state. However, given that only 39 people respondents that they had experienced a crime, and that 22 of those (56%) reported that the crime was due to bias, there is still a disturbing trend. While overall experience of bias crime was low, among those who experienced a crime at all, the majority felt it was due to their racial/ethnic identity. When asked if they had reported their victimization to police, 2 of the 22 did not answer, but 14 did not report their bias crime victimization to police, and only 6 (30%) chose to report.

In addition to asking if they had ever been the victim of a crime, and whether or not that was due to their identity as someone from the Micronesian region, we also asked whether they had been “has anyone said things to you that made you feel threatened, scared, or intimidated, because you are Micronesian” as a way to capture behavior that could perhaps be classified as criminal threat or terroristic threatening. This variable was not collapsed into the overall direct bias crime variable when measuring diffusion because when and how unpleasant language rises to the level of a crime can be difficult to ascertain in surveys. Of the 457 respondents who answered this question, 32 (6.2%) reported that they had had these experiences.
Related to bias crimes, we also asked how many respondents had encountered other prejudice-motivated behaviors such as discrimination at work or in public accommodation. Of those who answered this question, 27.5% reported experiencing workplace related discrimination or prejudice, 11.1% experiences discrimination in a medical/mental health or social service setting, and 7.6% reported discrimination in public accommodation. When considering who had experienced any of these adverse prejudicial events (either bias crime, threats, or discrimination), 29.8% of the total had experienced at least one prejudiced incident.

Goal 2: To determine the diffusion effects of bias crime victimization in regard to psychological, social, and safety consequences based on social proximity to bias crime.

Bivariate analyses were conducted on all the relevant psychological, community, and acculturation variables (Table 2). There were many factors that reflected a pattern found previously in the literature when comparing those respondents who had experienced bias crimes directly and those who had not, such as direct victims reporting more anxiety and reporting less trust in police. However, there were some patterns that were the opposite of what was expected, or the pattern was more complicated than predicted. For example, the literature suggests that being the victim of a bias crime might make someone devalue the identity that caused them to be victimized (in this case, that Micronesians who experienced bias crimes would devalue being Micronesian). Contrary to that thinking, the 22 people who said they had been victims of bias crime reported less cultural shame and a lower sense of cultural inferiority than those who had not been victims of bias crime. They also had a greater belief in a just world than those who had not been victims, which would also be counter to our current understanding of the impact of bias crimes. These differences are statistically significant, but quite small.
The results in these bivariate analyses that are the hardest to explain are those scales that show a mixed pattern of responding. Contrary to the hypothesis that direct victims would show the greatest impact of bias crime, followed by proximal and then distant victims, with non-bias crime victims showing the least impact, those who were proximal or distant victims frequently showed less impact than direct victims OR non-victims. The least cultural shame, the least anxiety or depression, etc. For example, direct victims showed a reduced sense of safety than those people who were not victims, but proximal and distance victims had a higher sense of safety than non-victims. Similarly, some outcomes were the opposite of what one would expect, such as in cultural shame, with direct victims of bias crime reporting less cultural shame than non-victims, but proximal and distance victims showing the least cultural shame. In regard to the primary outcome of interest, adaptation to the new host culture in Hawaii, results were statistically significant, but showed the puzzling pattern where direct victims and non-victims had the same mean scores while proximal and distant victims had higher scores on adaptation. Another possibility is that this reflects acculturation patterns – those who have been able to acculturate and adapt are knowledgeable about the challenges facing their community, but are not the direct victims themselves.

While the distance to bias crime variable may be an undercount of people who were distant, proximal, or direct victims, when combining those who said that they had been a direct victim of bias crime with anyone who reported being a victim of discrimination in employment, public accommodation, or medical care, and anyone who reported that they had been threatened due to their Micronesian identity (n = 154, 29.8%) and comparing them to those respondents who reported no experiences of bias or discrimination, patterns emerged that are consistent with the literature. Those respondents who experienced bias reported impacts among the
psychological impacts that are consistent with the literature, such as more depression (mean = 7.29 vs. 8.98, p < .006), more anxiety (mean = 6.14 vs. 7.97, p < .001), lower scores on feelings of safety (mean = 3.16 vs. 3.04, p < .028). In regard to the primary variables of interest, sociocultural adaptation and adjustment to Hawaii, victims showed slightly lower adaptation but it was not statistically significant. Among the community variables, victims of bias showed more emotional connection to their ethnic community (mean = 3.48 vs 3.63, p < .023), lower cultural shame (mean = 2.44 vs. 2.302, p < .019), and lower cultural inferiority scores (mean = 2.64 vs. 2.51, p < .026) compared to non-victims, which is contrary to current thinking on the impact of bias.

While these findings are intriguing as an area for additional research, combining these variables provides additional evidence of the direct impacts of bias crimes and discrimination, but cannot answer the question about diffusion effects into the community.

Goal 3: To determine how the negative impacts of bias crime (including consequences to psychological well-being, feelings of safety, and sense of community) impact the adaptation of COFA-migrants to living in Hawaii.

To test the initial relationship between sociocultural adaptation and connection to Hawaii and bias crimes and discrimination, we utilized a standard OLS regression. First, we entered into the equation the block of demographic variables (such as income, English proficiency, etc.), then added experiences of bias crime (as a yes/no variable), and experiences of discrimination with the sociocultural adaptation scale as the outcome variable. While many of the demographic variables retained statistical significance, the bias crime (as a binary direct victim/not a victim) and discrimination variables did not. Thus, we found no statistically significant relationship between experiences of prejudice and sociocultural adaptation, when considering other related
factors. This lack of results may be because the sociocultural adaptation scale measures many logistical items, like “being able to use the bus system” or “make friends,” which may not be impacted as much due to these experiences. However, on the other side of adapting to a new home is feeling a part of the community and getting your needs met by that community.

To explore this relationship further, we switched the outcome variable from the Sociocultural Adaptation scale to the Sense of Community Scale (Chavis, Lee, & Acosta, 2008) that measures two subscales, feeling emotional connection to a community and feeling that one’s needs are being met by the community. When we put the more logistical subscale about getting needs met by people in Hawaii there were again no significant differences among participants who had experienced bias crime or discrimination at work, but there was a statistically significant difference for those who had experienced discrimination in public accommodation ($t = 3.31, p < .001$). When the Connection to People in Hawaii subscale was used, reflecting how connected people feel to the people of Hawaii (as opposed to their ethnic group or Micronesians generally), discrimination in public accommodation again emerged a significant predictor ($t = 1.99, p < .046$), and bias crime experiences.

Structural Equation Modeling (SEM) based on the proposed model, taking into account latent factors for psychological factors, community factors, and safety factors while exploring relationships with bias crime and discrimination experiences and their impact on a) sociocultural adaptation, and b) sense of community did not provide promising answers. All models showed weak model-fit statistics for predicting sociocultural adaptation or a sense of community. Adding variables related to bias crime or discrimination experiences did not significantly improve any of the models. Further analyses to mine this data and explore additional possible relationships are
planned. However, these data currently do not demonstrate a relationship between experiencing bias crime and/or discrimination and sociocultural adaptation or sense of community.

**Limitations**

There are many limitations to this study, and many issues with the research that are worthy of note. Regarding the primary variable of interest, cultural experts commented that culture and language may have been a barrier to accurately answering the bias crime question; bias crime laws are a typically western categorization and Micronesian nations do not have a similar law in their country. So while we asked the question without using the term based on the advice of cultural experts (“have you ever been the victim of a crime where someone targeted you because you are Micronesian”) there may have been problems with understanding what was being asked, both for English-speakers and in interpretation/translation. Another cultural issue also may have arisen. One cultural expert who assisted with interviews saw some tension in respondents during this line of questioning, suggested that in some of the ethnic groups within the sample may have felt a need to “show face” and their pride would not allow them to admit to problems within the community. While all the categories were lower than expected, the distant victim category in particular was expected to be the largest category, but instead was the smallest, leading us to believe that something in the way was asked caused a problem for the participants.

While this study did not find any diffusion effects as proposed in the original hypotheses when examining the bivariate statistics of bias victimization experiences with community, psychological, or safety impacts. This finding may in fact represent reality - that those who know of the problems but are not direct victims may psychologically gird themselves or find ways to increase supports so as not to become direct victims and then feel stronger for it. However,
similar to the discussion above, there is also a strong possibility that the confusion about what bias crimes are may be driving this lack of/inconsistent findings. Given that so few people say they know of bias crimes happening to community members (the distant victims) while there have been numerous newspaper reports coming out in this timeframe, there appears to have been something problematic in the ways that the bias crime question was asked that may be obscuring differences between these groups.

Implications for criminal justice policy and practice in the United States

Establishing the prevalence of bias crimes and discrimination against Micronesian people in Hawaii will have a direct impact on the State. There have been numerous media stories about the bias that Micronesian people experience in Hawaii but little data has accompanied those news stories. Pairing the data with the reporting may now finally allow community activists and activists to work with government officials to bring attention to this issue. Currently, in concert with a local media outlet who is writing a story about the results of this study in regard to prevalence of bias and discrimination (community report available online at https://www.hawaii.edu/sswork/wp-content/uploads/Research-Report-Stotzer-2019_2.pdf), a public event is being held April 6th to advance a dialogue about discrimination and bias in the state. Another product discussed in the grant application was providing Continuing Education Credit, which was conducted and recorded in an online session in November of 2018. This session was one of the School of Social Work’s most well-attended CEUs (close to 100 participants), and was recorded for future dissemination and sharing. In addition, community groups have asked research team members to come and discuss results with their social service agencies, research teams, or educational units to learn more about the study. Already, the results
of this study are being used to generate discussion in our community. As mentioned in the grant application, Hawaii is one of the few states that does not participate in reporting bias crimes to the FBI, and having documentation of their prevalence may encourage the Attorney General’s office to reconsider their strategy for reporting.

Also in regard to Goal 1, while 22 out of 517 respondents may not seem like a large number, bias crimes are fairly rarely occurring events overall. For example, national statistics from the FBI paired with population estimates have shown that at least 8 out of every 100,000 African Americans, 12 out of every 100,000 Muslims, 15 out of every 100,000 Jewish people, and 13 lesbian, gay, or bisexual people out of every 100,000 experience bias crimes (Stotzer, 2007). These 22 reports reflect a rate closer to 4,000 out of every 100,000 Micronesians experiencing bias crimes. Given that those estimates of other populations are based on police reports, if the 6 Micronesian bias crime victims are compared instead, that is still a rate closer to 1,000 per 100,000 Micronesian person in the US, a substantially higher rate than other vulnerable groups. This findings is particularly troubling given that Hawai‘i’s law enforcement agencies do not participate in federal data collection efforts for bias crimes, and that the Hawai‘i Attorney General’s office only reported 32 total bias crimes from 2022-2018, only one of which was reported to have been motivated by anti-Micronesian bias (Perrone, 2019).

In regard to goal 2, unfortunately, the main goal of discerning the diffusion effects of bias crime from direct victims to distant and proximal victims had methodological issues that made it impossible to analyze the data using this operationalization. While research “errors” may seem at first a disappointment, this does force us to reconsider the methodology for how we study diffusion effects. Given that no one has looked at this variable before by asking people about being proximal or distant victims before and those questions were made up by the research team,
it is possible that the questions themselves were unclear and/or problematic. Future research into this phenomenon should look more closely how to capture this experience more accurately. In addition, the participants ranged in their English language proficiency as migrants and multiple interpreters in multiple languages were utilized. As mentioned earlier, bias and discrimination are also not common legal concepts outside of Western nations, which could have led to confusion about what exactly was being asked. This methodological problem is also a significant contribution to research on immigrants and their bias experiences - bias crimes themselves are a very Western concept and translations, even when vetted across multiple people for translation validation, may still be hard for immigrants or migrants from non-Western nations to answer accurately. However, when examining those who had been direct victims of bias crime to those who had not (collapsing the proximal and distant victims into “not direct victims”) a similar pattern to prior research was found - namely increased anxiety, decreased feelings of safety, etc. It also provides preliminary evidence that experiencing bias crimes makes it more challenging for migrant/immigrant groups to feel connected to their new home (also goal 3). Prior theoretical literature that hypothesized that bias crimes warn vulnerable minorities that they are not welcome or wanted appears to have preliminary support from this study in the bivariate statistics, although the more advanced models did not hold well due to methodological concerns. These findings help to build the case for the “additional harms” associated with bias crimes that have been used to justify their place in our criminal justice jurisprudence. More information is certainly warranted about the emerging evidence of the diffusion effects of bias crimes on non-immigrant communities (see Patterson et al., 2018a, 2018b, 2018c), and some preliminary qualitative information about immigrant communities and the impact of bias crimes on distance or proximal community members (Chakraborti, & Hardy, 2016).
While bias crimes are a “message” crime intended to warn communities that they are unwanted, bias crime laws were passed as a way for society to convey a message that these types of behaviors are unacceptable. Finding additional ways for the justice system to convey information about bias crime laws to new immigrants may be a strategy to increase adaptation and acculturation, even when bias crimes happen. Given that Petrosino and Pace (2015) found that new immigrant communities are not organized enough to respond to bias crimes effectively, these findings suggest that the government could act on behalf of new immigrants to convey the nature and meaning of bias crimes and then investigate and prosecute them appropriately to organize against hate when minority communities do not have the resources to do so themselves.

As the U.S. is debating how to best structural their immigration policies and how to best assist immigrants in their adaptation to life in the U.S., this project demonstrates that bias crimes, even when infrequently occurring, can disrupt important adaptation processes important to our societal goals of diversity and inclusivity. However, and perhaps more importantly, the null findings suggest we need to think more critically as researchers in how to measure the diffusion effects of bias crimes among community members unfamiliar with our system of laws and who have language challenges when answering research questions about legal matters. Clarifying how to measure the impacts of bias crime as they ripple throughout a community and isolating best practices for researchers to capture this variable, as well as designing questions about bias crime experiences that are relatable and translatable for immigrant communities is a critical area of research need as the criminal justice system focuses more attention on the negative experiences of immigrant communities in the United States.
References


Perry, Barbara A., & Alvi, Shahid. (2012). 'We are all vulnerable': The in terrorem effects of hate crimes. *International Review of Victimization, 18*(1), 57-71.


Plot 1. RDS Recruitment Tree Plots
Table 1: Goal 1: Descriptive Statistics of Frequency of Bias and Discrimination Incidents

<table>
<thead>
<tr>
<th>Bias Crimes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Victims</td>
<td>4.6%</td>
</tr>
<tr>
<td>Proximal Victims</td>
<td>8.3%</td>
</tr>
<tr>
<td>Distant Victim</td>
<td>3.7%</td>
</tr>
<tr>
<td>Criminal Threat or Terroristic Threatening</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

**Occupational Discrimination**

<table>
<thead>
<tr>
<th>Question</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because you are Micronesian, have you ever been treated poorly, e.g., made fun of, gossiped about, etc., by coworkers or a boss in Hawai‘i?</td>
<td>24.1%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been mistreated at a job in Hawai‘i, such as not being given a promotion?</td>
<td>9.4%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied a job in Hawai‘i?</td>
<td>8.9%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been fired from a job in Hawai‘i?</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

**Medical/Social Service Discrimination**

<table>
<thead>
<tr>
<th>Question</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because you are Micronesian, have you ever been treated poorly or harassed in health care settings?</td>
<td>7.2%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been treated poorly or harassed in a mental health care setting?</td>
<td>4.8%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied hospitalization?</td>
<td>2.7%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied healthcare from a general provider in the last 12 months?</td>
<td>4.3%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied mental health treatment?</td>
<td>2.7%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied prescription drugs?</td>
<td>2.7%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied a treatment for chronic condition that requires many treatments, such as dialysis treatment, chemotherapy, surgeries?</td>
<td>1.6%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been denied a medical device you need such as wheelchairs or prosthetics?</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

**Public Accommodation Discrimination**

<table>
<thead>
<tr>
<th>Question</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because you are Micronesian, have you ever been denied service such as at a restaurant or store?</td>
<td>5.0%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been refused a home that you wanted to rent or buy?</td>
<td>4.8%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been evicted or kicked out of your home?</td>
<td>2.7%</td>
</tr>
<tr>
<td>Because you are Micronesian, have you ever been kicked off public transportation (e.g., bus, taxi)?</td>
<td>2.1%</td>
</tr>
</tbody>
</table>
Table 2. Goal Two: Bivariate Analyses of Demographic, Psychological, and Community Factors when Considering Distance to Bias Crime (variable that were statistically significant/approaching significance)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Direct Victim (n = 22)</th>
<th>Proximal Victim (n = 40)</th>
<th>Distant Victim (n = 18)</th>
<th>None (n = 403)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociocultural Adaptation</td>
<td>3.4(0.7)</td>
<td>3.9(0.7)</td>
<td>3.6(0.8)</td>
<td>3.4(0.7)</td>
<td>0.001</td>
</tr>
<tr>
<td>Ethnic Group Meets Needs</td>
<td>2.8(0.5)</td>
<td>3.3(0.7)</td>
<td>3.5(0.8)</td>
<td>2.9(0.8)</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotional Connect to Ethnic Group</td>
<td>3.6(0.5)</td>
<td>3.8(0.7)</td>
<td>4.0(0.8)</td>
<td>3.5(0.6)</td>
<td>0.001</td>
</tr>
<tr>
<td>Micronesian Community Meets Their Needs</td>
<td>2.6(0.7)</td>
<td>2.9(0.7)</td>
<td>3.3(0.7)</td>
<td>2.9(0.8)</td>
<td>0.036</td>
</tr>
<tr>
<td>Cultural Shame</td>
<td>2.2(0.9)</td>
<td>2.1(0.7)</td>
<td>1.9(0.5)</td>
<td>2.5(0.6)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Cultural Inferiority</td>
<td>2.4(0.6)</td>
<td>2.2(0.7)</td>
<td>2.0(0.7)</td>
<td>2.7(0.6)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Social Support</td>
<td>4.0(0.8)</td>
<td>4.3(0.7)</td>
<td>4.1(0.5)</td>
<td>3.9(0.6)</td>
<td>0.009</td>
</tr>
<tr>
<td>Just World</td>
<td>3.5(1.2)</td>
<td>3.6(0.8)</td>
<td>3.4(0.7)</td>
<td>2.9(0.9)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.1(1.0)</td>
<td>1.5(0.6)</td>
<td>1.8(0.5)</td>
<td>2.0(0.8)</td>
<td>0.001</td>
</tr>
<tr>
<td>Sense of Safety</td>
<td>2.9(0.4)</td>
<td>3.1(0.7)</td>
<td>3.3(0.5)</td>
<td>3.1(0.5)</td>
<td>0.098</td>
</tr>
<tr>
<td>Fear of Crime</td>
<td>3.5(0.9)</td>
<td>3.2(0.9)</td>
<td>2.8(0.6)</td>
<td>3.5(0.8)</td>
<td>0.001</td>
</tr>
<tr>
<td>Trust police</td>
<td>2.6(1.0)</td>
<td>3.4(0.9)</td>
<td>3.6(0.7)</td>
<td>3.1(0.8)</td>
<td>0.001</td>
</tr>
</tbody>
</table>