ASSESSING MULTIRACIAL ETHNIC IDENTITY STATUS AND MENTAL HEALTH IN HAWAI'I

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ABSTRACT

The multiracial population, or people who identify as two or more races, is one of the fastest growing segments of the population nationally, and about one-quarter of people in Hawai‘i are multiracial. How multiracial people identify racially or ethnically has been explored by researchers for nearly 100 years. Many theories developed during this time suggest that multiracial people develop an identity in a linear fashion, though others contend that ethnic and racial identity is situational and in reaction to a number different factors, ranging from individual-level factors like skin color to policy-level factors related to data collection. In addition, ethnic and racial identity have a demonstrated relationship with self-esteem and mental health outcomes. However, much of this research has been conducted on the continental United States. The purpose of this dissertation was to examine the relationship between ethnic and racial identity and mental health across the lifespan in Hawai‘i. Study 1: In the first study, the psychometric properties of the Multiracial-Heritage Awareness and Personal Affiliation scale (M-HAPA), which measures identity status, was tested with a cohort of multiracial Hawai‘i-based adolescents. After iterative exploratory factor analyses and confirmatory factor analysis, this study found that the cohort endorsed five different identity statuses. Study 2: The second study examined the relationship between identity status, self-esteem, and depression via structural equation modeling. This study found a highly significant relationship between identity status, self-esteem and depression, and that identity status and self-esteem mediated one another. Study 3: A qualitative study that employed a timeline method examined the relationship between ecological factors that affect identity status and mental health across time in a sample of multi-racial adults in Hawai‘i. Thematic results from this study reflected the racism and health model and common factors across the lifespan that affect identity and mental health. Taken together, these three studies demonstrate the relationship between ethnic identity and mental health for multiracial individuals across the life course in Hawai‘i. Implications for public health practice, educators, and mental health practitioners include considerations for multiracial identity status in culturally grounded interventions, shifting practice to include cultural humility, and supporting multiracial individuals in their identity development through increased practitioner awareness of multiracial identity issues.
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CHAPTER 1. INTRODUCTION
A Historical Perspective on Data Collection and Reporting on Multiracial People

How the terms “race” and “ethnicity” are often conflated or used together (i.e., “race/ethnicity”) is important in terms of how this dissertation defines “multiracial” people. Ford and Hawara (2010) discuss at length the differences between these two terms, and how they interact with one another. Ford and Harawa write that “race” is a social categorization assigned to people, while “ethnicity” captures individual and social identities of people who belong to particular collectives, thus is more complex than race. Other means of assessing “racial” or “ethnic” categorization include blood quantum, which Kauanui (2008) contends is used to racialize indigenous people while also providing a way to question individuals’ cultural authenticity, heritage, and group membership. This becomes further complicated in the way blood quantum and genealogical ties are used to classify individuals into groups when reporting official health statistics produced by the state (Kaneshiro, Geling, Gellert, & Millar, 2011). Because “race” and “ethnicity” are often conflated, and because Hawai’i is a unique state where the reporting of statistics is complex, this manuscript uses “race” and “ethnicity” flexibly: when discussing racial groups, these will typically use the groupings assigned by the federal government and ethnic groups will be classified sometimes into the official federal government categories (Office of Management and Budget, 1997).

Multiracial people (also referred to as people who are “mixed-race” or of “two or more races”) are an emerging population but have had a long history in the United States (U.S.). The first anti-miscegenation laws to prevent racial mixing in the continental U.S. were passed in colonial Maryland and Virginia in the 1660s (Jordan, 2014); many of these laws remained on the books until the U.S. Supreme Court’s ruling on Loving v. Virginia in 1967 (Orelus, 2013). Debates over whether race is a social or biological, as well as how to quantify and report on racial/ethnic groupings, have considerably changed since the 1800s (Kagawa-Singer, 2001). The assumption that race was biological, as initially believed, relied on the theory that each racial group was “discrete, culturally and genetically heterogeneous” and had “evolved in isolation” (Kaplan, 2014). The separation of racial groups was based on the fallacy of different “subhuman species” based on phenotype, or skin color (Kagawa-Singer, 2001). However, others contend that race is a social construct as “pure races” have never existed (McKibbin, 2014). The use of race has been “medicalized” (Witzig, 1996), and deployed without consideration of its meaning or properly operationalized (Jones, 2001). Jones (2001) contends epidemiology uses race as a rough and imperfect proxy to simultaneously account for “class status, culture, and genes” (p. 299).

The “rules” for counting members of racial groups has changed periodically to reflect the needs of government monitoring and control. The first Census of 1790 only counted three racial groups in the U.S.: White, Black, and taxed Indian (Native American; Bennett & Claudette, 2000; James, 2001; Prewitt, 2005). Mixed Black-Whites were captured as “Mulatto” in the Censuses between 1850 and 1920; in the 1890 Census, this was expanded to include “Quadroon” and “Octoroon” (Aspinall, 2003). Asian ethnic groups were also added to the Census for political reasons; Chinese was added in 1870 and Japanese in 1890 to monitor immigration during the prevailing anti-Asian sentiment of the day (e.g., the Chinese
Exclusion Act of 1882; Bennett & Claudette, 2000; Lee, 1993; Prewitt, 2005). In the 1900 Census, mulatto, quadroon, and octoroon were collapsed into a single category “Black,” essentially codifying the “one-drop rule” (Aspinall, 2003) while simultaneously, ethnic European groups were collapsed into a single “White” category (Shih & Sanchez, 2009) contributing to the polarized racial divide between White and Black and White and Others (Lee, 1993; Muhammad, 2011; Saperstein & Penner, 2012). Other racial categorizations were added and removed over time. For example, “Mexican” was a racial group only in 1930, and “part-Hawaiian” was another racial group making an appearance solely in the 1950 Census (Pew Research Center, 2015).

Modifications to the U.S. Census’ racial categories have far-reaching funding implications for public health, social services, and poverty programs, and for how medicine conceptualizes “race.” A report from Brookings Institute estimated that in federal fiscal year 2008, nearly 61% of funds to programs guided by U.S. Census results were related to health to the tune of $272 billion. Additionally, over $326 billion were disbursed to programs that affect public health and the social determinants of health, including programs like the Medical Assistance Program, Section 8 and other housing related programs, and Head Start and other public education programs (Reamer, 2010). Furthermore, these funds also go to block grants for behavioral and mental health issues. In fiscal year 2015, $1.723 billion were provided in block grants for substance use treatment and prevention, over $457 million in block grants for community mental health services, and over $35 million for the protection of and advocacy for persons with mental illness (Hotchkiss & Phelan, 2017).

In 1997, the Office of Management and Budget released Statistical Policy Directive 15 which created a “check all that apply” method to capture racial mixture (Office of Management and Budget, 1997). This rule change was fought by a number of national organizations, including Chinese for Affirmative Action, the National Council for La Raza, and the National Association for the Advancement of Colored People (King, 2000; Mezey, 2003; Robbin, 2000), that were worried amounts granted to civil rights activities would become reduced if more people identified as “multiracial” (Otis, 2001; Reamer, 2010). Even with this new federally mandated option, disagreement on how to handle data for mixed race people persists (Aspinall, 2014; Corbie-Smith, Henderson, Blumenthal, Dorrance, & Estroff, 2008; Ellison, 2005; Ford & Kelly, 2005; Heinz, Muller, Krach, Cabanis, & Kluge, 2014; Jones, 2001; Kagawa-Singer, 2012; Kaplan, 2014; Tashiro, 2005). Pharmaceutical companies opposed this change as well saying a check-all-that-apply categorization system would make study results harder to interpret (Lee & Skrentny, 2010) while at the same time marketing drugs to monoracial groups (e.g., BiDil targeting Blacks and African Americans and Iressa for Asians) (Kahn, 2013; Lee & Skrentny, 2010; Phillips, Odunlami, & Bonham, 2007). Advocacy for disaggregated data options have been mostly spearheaded in the Asian and Pacific Islander research community (Islam et al., 2010; Srinivasan & Guillermo, 2000); however, little has been accomplished with regard to disaggregation of data for Asian and Pacific Islander groups, let alone multiracial people at the national level.
The state of Hawai‘i has its own system of reporting racial and ethnic identity. Kaneshiro and colleagues (2011) describe two methods employed by the state, one used in the Hawai‘i Health Survey and a different “blended methodology” (p. 169). The first method uses an algorithm developed by the Office of Health Status Monitoring that forces multiracial respondents into a single racial or ethnic categorization using parental racial categorization:

…if Native Hawaiian is listed as an ethnicity for either the mother or father, the individual is categorized as Native Hawaiian. Otherwise, the person is considered to be the first non-Caucasian ethnicity listed for the father. If the first listed ethnicity for the father is Caucasian or unknown then the individual is considered to be the first non-Caucasian ethnicity listed for the mother... However, one can see the shortcomings of using an algorithm rather than self-identification as it assumes the importance of ethnicity for multiethnic and multiracial individuals (Kaneshiro, Geling, Gellert, & Millar, 2011, p. 169).

The second method, or “blend methodology,” assigns an individual ethnicity “by ascertaining the ethnicity of the individual’s parents and grandparents and deriving a percentage” (Kaneshiro et al., 2011, p. 169). The resulting variable can either be continuous or categorical. The authors point out the how these measures shortcomings, including how ethnic categorizations may change over time for multiracial individuals and other external factors influence one’s identity, which make it difficult to accurately categorize or quantify race (Kaneshiro et al., 2011).

While Kaneshiro and colleagues (2011) touch on how racial categorization is a social construct, they fail to discuss how racialization functions in Hawai‘i and how continental U.S. conventions may seep into the Hawai‘i State classification system and how these measurement systems may contribute to further social stratification. For example, blood quantum, or percentage of ancestry defined in percentage terms (akin to the “blend methodology” discussed above) has been used to racialize indigenous peoples, and in the case of Native Hawaiians, serves to further dispossess Native Hawaiians from lands and sovereignty claims (Kauanui, 2008) and to disprove that Native Hawaiians are, in fact, Native Hawaiian, owed to their mixed ancestry in order to minimize differences in socioeconomic status (Rohrer, 2010). In sum, measurement and quantification of multiracial people are imperfect and is rooted in politics and economics, which may affect how multiracial people identify themselves and choose to integrate their heritages.

**Multiracial People Today**

The number of multiracial people (also referred to as mixed race people or those reporting “two or more races”) in the United States (U.S.) is growing. In 2012, the U.S. Census Bureau reported that 2.5% of the nation’s population, approximately 8 million people, identified as multiracial (Jones & Bullock, 2013). This number is predicted to grow to 26 million people by 2060, more than doubling the proportion of multiracial people nationally to 6.2% (Colby & Ortman, 2015). Another study of the current multiracial population, based on parental and grandparental reported ancestry, estimates of 6.9% of Americans are multiracial, nearly triple the official Census estimate, and outpacing population predictions by five decades (Pew Research Center, 2015).
Looking specifically at multiracial individuals, mixed Black-White, “Some other race”-Whites, and Asian-Whites made up 20.4%, 19.3%, and 15.9% of the total multiracial population in 2010, respectively (Jones & Bullock, 2013). The multiracial population increase is due to higher numbers of interracial marriages, which account for nearly 10% of all couples in the U.S. About 38% of all mixed-race unions are between Hispanic and Non-Hispanic Whites (Johnson & Kreider, 2013). Asians were most likely to “marry out” from their racial groups, with 28% reporting marrying someone of a different racial group in 2010 (Pew Research Center, 2012).

Compared to the continental U.S., Hawai‘i has a much higher proportion of multiracial people. Nearly 25% of the state population reports being multiracial; Alaska and Oklahoma have the next largest multiracial populations (8% and 7%, respectively). Among Hawaii’s multiracial population, 70% are some mix of White, Asian, Native Hawaiian or other Pacific Islander. Only 2% of multiracial people identify as this tri-racial mix nationally, versus 22% of multiracial people in Hawai‘i. Asian-Whites account for 18% of the multiracial population in both Hawai‘i and the U.S. overall. Asian-Native Hawaiian/Pacific Islander and White-Native Hawaiian/Pacific Islanders account for a much higher proportion of multiracial people in Hawai‘i, compared to the U.S. overall (18% versus 2% and 12% versus 2%, respectively; Krogstad, 2015). While the state’s overall population is highly multiracial, the proportion of children in the state who are two or more races is much higher. American Community Survey data from 2017 estimates that 41.5% of the state’s 305,962 children under the age of 18 are multiracial (U.S. Census Bureau, 2019b), which is much higher than the national estimate of 6.3% (U.S. Census Bureau, 2019a).

Although the multiracial population in the U.S. has been growing, scholarship has not kept pace. For example, Chamaraman and colleagues (2014) conducted a broad literature review of peer-reviewed social and health sciences articles from several fields, including psychology, sociology, public health, education and social work, spanning two decades of scholarship from 1990 to 2009. After applying their exclusion criteria, the authors found only 125 articles covering 133 studies pertained to multiracial people. Of the studies included, the review found 55% of studies examined the topic of racial-ethnic identity in this population, while another 32% examined self-reported adverse mental health outcomes, including depression, stress, and anxiety (Charmaraman, Woo, Quach, & Erkut, 2014). An older literature review of multiracial people specifically examining psychological well-being and adjustment found differences in depression in clinical and non-clinical samples of multiracial people, with more non-clinical samples reporting lower levels of depression or sadness (Shih & Sanchez, 2005).

Many studies of multiracial ethnic and racial identity and mental health outcomes are rooted in theories related to maladjustment. For example, Park’s Marginal Man theory posits multiracial people’s negotiation of two or more racial identities will lead to poorer psychological outcomes (Bracey, Bámaca, & Umaña-Taylor, 2004; Cheng & Lively, 2009). These negotiations include cultural conflict (Botts, 2016) or being forced to choose between two races (Suzuki-Crumly & Hyers, 2004). Older studies depicted multiracial people as having psychological problems, but much of this work was drawn from clinical samples (Choi-Misailidis, 2009; Suzuki-Crumly & Hyers, 2004). Other studies also use “Marginal Man” as
a theoretical framework for studying multiracial people and depression, though these authors presented other possible theoretical consideration for maladjustment and psychological outcomes (Cheng & Lively, 2009). A more nuanced, contemporary scholarship on multiracial identity development has emerged more recently, expanding beyond a single theory of marginality to ones that recognize the various possibilities of the multiracial experience and multiple identity choices or statuses. The next section discusses contemporary theories of ethnic identity development, followed by a review of the literature on identity status and mental health, and concluding with a discussion of factors related to identity formation from a socio-ecological perspective.

**Contemporary Theories of Ethnic Identity Development**

Several theories have been developed to explain the process of multiracial identity development (Shih & Sanchez, 2009). A comprehensive review by Phinney (1990) of ethnic identity formation literature for monoracials found a lack of consensus regarding identity constructs. Broadly, the conceptual frameworks found in the review were based on social identity theory, acculturation and cultural conflict, and identity formation. Components of ethnic identity found in the review included one’s own identity at one point in time stemming from group membership and cultural connection. In terms of identity over time, studies examined used a linear model or stages of ethnic identity formation. Empirical studies have also used different constructs for factor analyses, yielding inconsistent findings (Phinney, 1990).

Nearly 20 years later, Rockquemore, Brunsma, and Delgado (2009) conducted a review examining the prevailing literature on ethnic identity formation for biracial people and classified them four ways. Some of the theories in these approaches will be discussed further below but are worth introducing here as they provide context for how identity formation has been handled in research. The first approach, the “problem approach,” was rooted in multiracial status as problematic in a racialized country like the U.S. These theories, developed during the Jim Crow era and during the introduction of the one-drop rule in the Census, viewed identity through the prism of segregation (Park and Stonequist as cited in Rockquemore et al., 2009). Stonequist developed a theory that was linear, starting with an introduction to both parents’ races and marginalization, a crisis hallmarked by cultural conflict, and eventually ending with adjustment (Stonequist as cited in Rockquemore et al., 2009). Stonequist (1935) wrote an essay using the Hawai‘i context as a means for explaining his theory before the publication of his book on marginal man theory. In calling upon the “melting-pot,” Stonequist contextualized his theory using the example of the importation of racial politics from the U.S. in overthrowing the Hawaiian Kingdom and creating multiple inequalities through economics, politics, and social upheaval. He further contextualized his theory using second-generation Japanese, torn between Japanese tradition and living an Americanized life that caused internal conflict and marginalization.

The second category, the “equivalent approach,” followed Erikson’s model of ego formation, where multiracial people identities followed a similar trajectory as Blacks, wherein multiracial people move along several linear stages resulting in a commitment to an identity (Erikson cited in Rockquemore et al., 2009). The third approach, “variant,” posits biracial and multiracial people work to construct an identity
that integrates either “biracial” or “multiracial” from a multidisciplinary approach (Root as cited in Rockquemore et al., 2009), and highlight Poston’s model of biracial identity as an example of the variant approach (Rockquemore et al., 2009). The last classification, an “ecological approach,” finds multiracial identity may be context specific and may not have discernable linear stages. The authors call the approaches under this category “ecological,” as these theories concentrate on contexts surrounding identity development. Here they also cite Root’s ecological framework for understanding multiracial identity, which uses the idea of “border crossings” out of different social locations from an intersectional perspective (Root as cited in Rockquemore et al., 2009). Three of the approaches outlined by Rockquemore and colleagues (2009) are linear in nature (problem, equivalent, and variant), while the remaining one, the ecological approach, is non-linear.

**Linear Approaches to Identity Formation**

Phinney (1989) developed a theory of ethnic identity development among adolescents. Her theory was based on a number of stages defined by the prevailing ethnic identity formation and ego identity literature at the time. Phinney originally conceived four different ethnic identity statuses. These were “diffuse,” or no exploration or clear understanding about ethnic identity; “foreclosed,” with little to no exploration of identity and either positive or negative feelings based on one’s socialization; “moratorium,” wherein one has explored their identity and may be confused about their identity’s meaning; and, “achieved,” where one has both explored and come to both understand and accept their identity (Phinney, 1989, p. 38). In her empirical test of the theory among 91 high school students, Phinney found that she was unable to code separately for diffused or foreclosed, which led to the creation of a single unexplored category, later called “unexamined” (Phinney & Chavira, 1992). Over half of the sample had a diffused or foreclosed identity status, while 22.9% had a moratorium status, and 21.3% had an achieved status. While there were no significant differences between ethnic groups on stages of development, over half (53.3%) of Asian American respondents indicated that they would have preferred to have been White compared to only 12.0% of Black and 8.7% of Hispanic participants (Phinney, 1989).

Phinney and Chavira (1992) followed up with this cohort in an exploratory longitudinal study to examine changes in participants’ ethnic identity as the cohort moved into young adulthood. They hypothesized that participants who had been at lower stages (e.g., diffuse and foreclosed as “unexamined”) would advance to higher stages (e.g., moratorium or achieved). Of the original 91 students, 18 were in the follow-up sample. Only one of the eight participants who had been in an unexamined status remained unexamined, two moved to a moratorium, and five had identity achievement. Interestingly, two male participants, one Asian and one Hispanic had regressed in their identity statuses from either moratorium or achieved to unexamined.

A theory from Poston (1990) concentrates on biracial identity development and has five stages. The first stage is “personal identity,” where a biracial person has no sense of their ethnic background. The second stage, “choice of identity,” is one where the individual is pushed to identify as one group, usually helped along in this decision through status factors (e.g., ethnic background, socioeconomic status or
neighborhood composition), support factors (e.g., parental and group influence and acceptance), and personal factors (e.g., phenotype, additional language acquisition). Poston calls the third stage “enmeshment/denial,” characterized by confusion, guilt, self-hatred, and denial of group membership. “Appreciation,” the fourth stage, is where multiracial persons learn more about their other backgrounds or participate in socio-cultural activities to learn more, followed by a fifth and final stage, “integration.”

The Kich model (Kich as cited in Choi-Misailidis, 2003) is also linear and is comprised of three stages. First, multiracial people experience an "awareness of differentness" starting between ages 3 and 10, characterized by social comparison. The second stage, starting around age 8 and lasting until late adolescence, is characterized by a “struggle for acceptance.” This includes experimenting with different racial identities. Kich’s model concludes with an “integration of identities” in late adolescence or early adulthood.

**Ecological Approaches to Identity Formation**

Root (1998) developed an ecologically informed theory of identity formation, wherein the different ecological “lenses” inform a multiracial person’s identity. Root’s “Macrolenses” included gender, the historical contexts for race relations in the region in which individuals were from, and socioeconomic position. “Microlenses” included inherited influences, such as parents’ identity, languages spoken in the home, phenotype, and familial identity. Second were traits, which included temperament, and skills related to society and coping. Next is a generational layer; embedded in this layer were social interactions in a community, across intrapersonal, community, and institutional relationships. Racial and ethnic identities were also embedded in the generational layer (p. 238). Root (2004) further examined the generational differences of multiracial identities of women through a phenomenological study that examined these intersections. This resulted in a matrix of possible identities based on the respondents’ generational status across three cohorts: “exotic” born prior to the late 1960s, “vanguard,” born between the late 1960s and late 1970s, and “biracial boomer,” born after the late 1980s, or an era Root calls “post-civil rights.” The racial identities each of these groups took on were variable. First, “exotic” took on both the racial identity assigned by society and/or monoracial identities. “Vanguards” could assume the two identities assumed by exotics, and also a multiracial identity. “Biracial boomers” could assume either a new racial or symbolic racial status, in addition to the three other identities of socially assigned, monoracial, or multiracial. Root called upon therapists to examine whether therapists’ racial conceptions are also rooted in generational differences and whether they suffer what she terms a “cohort gap” in understanding these new constructions of racial identification (p. 29).

Rockquemore and Brunsma (2002) developed a multidimensional model of biracial identity through an examination Black-White biracials. They identified four different identity statuses: a “singular identity” (exclusively one race or another), a “border identity” (a unique category using both races), a “protean identity” (changing between Black, White, or biracial depending on situation), and “transcendent” or “human” identity, based on no definable characteristics (Rockquemore & Brunsma, 2002). A newer study further expanded on these four identity types to include internal and external validation of identity.
and included Asian-Whites in the sample. Results from this study indicated differences in how Asian-Whites self-identify versus Black-Whites. Black-Whites most often selected a validated border identity, while Asian-Whites used a protean identity more often. The authors point out that social circumstance and relationships may contribute to why Asian-Whites picked a protean identity (Lou, Lalonde, & Wilson, 2011). The authors conducted a similar study, subdividing Asian-Whites into South Asian-White and East Asian-White categories. In this study, East Asians-Whites selected a protean identity more often, while South Asian-Whites identified with having an unvalidated border identity or holding a biracial identification while others do not accept biracial as a valid categorization (Lou & Lalonde, 2015). The original Rockquemore and Brunsma (2002) multidimensional model has been further refined with the addition of identity dimensions contributing to ethnic identity for Black-Whites include social, political, cultural, physical, and formal identities, leading to the development of a complex identity matrix (Brunsma, Delgado, & Rockquemore, 2013).

Choi-Misailidis (2003) developed the Multiracial-Heritage Awareness and Personal Affiliation (M-HAPA) theory and empirically tested it in her dissertation. It shares some characteristics of Rockquemore and Brunsma (2002). The M-HAPA theory helps to solve some of the issues with prevailing linear models of ethnic identity formation. As conceptualized by Choi-Misailidis, M-HAPA allows for the assertion of identity depending on the situation. The theory posits that individuals hold both an internal multiracial identity, comprised of an internal personal awareness of one’s ancestry, and an external identification with one’s racial or ethnic groups. Examples of personal awareness include feelings, sense of belonging, or attitudes towards one’s groups. External identification includes racial reporting on forms or participation in cultural events. These factors closely align with the socio-ecological influences introduced earlier. The theory hypothesizes the closer these two components are to one another, the better the mental health outcomes. Choi-Misailidis found three identity statuses during empirical testing of the theory: “marginal,” “singular,” and “integrated” identity statuses (Choi-Misailidis, 2009; p. 303). A marginalized status includes separation of all aspects of one’s heritages. Singular identity status refers to an individual’s alignment with one particular ethnic or heritage group. Lastly, integrated identity status was further subdivided into two subfactors, a “combinatory” factor wherein individuals identified with both parents’ heritages, and a “universality” factor where individuals identify with a variety of racial groups (Choi-Misailidis, 2009).

Ecological Influences on Multiracial Identity

A number of researchers have made the case that ethnic identity (Ong, Fuller-Rowell, & Phinney, 2010) and multiracial identity (Choi-Misailidis, 2003) are influenced by context. Ethnic identity is formed over time (Ford & Harawa, 2010) and this identity can be influenced by multiple socioecological factors (McLeroy, Bibeau, Steckler, & Glanz, 1988). On a personal level, phenotype and appearance play a significant role in one’s identity. For instance, observer perceptions of multiracial individuals can affect how multiracial people identify (Herman, 2004). However, how an individual perceives their own
phenotype also plays heavily into this decision for multiracial Asians (Khanna, 2004). Personal feelings
about Whiteness may also influence identifying with a minority group (Wilton, Sanchez, & Garcia, 2013).

At an interpersonal level, parents are particularly salient for ethnic identity, and will typically help
shape the identity of children. For instance, parents will often identify part-Native Hawaiian children as
Native Hawaiian if the parents have a higher connection with the ‘āina, or the actual land of Hawai‘i or
“that which feeds us” both literally and figuratively (Kana‘iaupuni & Liebler, 2005). Another study found
adolescents will self-identify as Black if their father was Black, but in Asian-White families, participants
would pick the mother’s race no matter if she was Asian or White (Bratter & Heard, 2009). Relationships
and discrimination within the family is another issue. Microaggressions by family members against
multiracial participants have been documented: one study included denials of identity and experiences by
monoracial family members (Nadal, Sriken, Davidoff, Wong, & McLean, 2013). Familial class level is
another factor. In Hawai‘i, the ability to participate in “outmarriage,” or marriage out of one’s group (e.g.,
White and Native Hawaiian marriages) is also influenced by socioeconomic position (Fu, 2007), which
could influence the ethnic identity of the offspring from these unions. Studies outside of Hawai‘i have
found higher family socioeconomic status results in moving children’s identification from minority status to
multiracial or White identification (Brunsma, 2005). Biracial individuals from middle-class backgrounds are
more likely to identify as biracial than those from working class backgrounds (Townsend, Fryberg,
Wilkins, & Markus, 2012).

Community level factors, such as location and neighborhood composition, can also influence
identity choice. Biracial or multiracial Blacks will often identify as Black if the neighborhood is mostly
Black, but non-Black as community environment changes to less Black. This is also similar among Asian-
Whites, where the tendency is to identify as Asian if one is located in a predominantly Asian community
and White if in a predominantly White community (Khanna, 2016). Aside from cultural and ancestral
connection to Hawai‘i, the number of Native Hawaiians in a community also influences parental choice to
list their children as part-Native Hawaiian in the Census (Kana‘iaupuni & Liebler, 2005). Community
perceptions of “model minority” status of Asians may influence multiracial Asians to identify as Asian
(Suzuki-Crumly & Hyers, 2004). This racial hierarchy is also reflected in another study, where Asian-
Whites were more likely to identify as biracial compared to Black-Whites or Latino-Whites (Townsend et
al., 2012).

At an institutional and policy level, a number of drivers may influence how multiracial people
identify. Multiracial adolescents are perceived as having more academic and behavioral issues among a
national sample of middle and high school counselors (Harris, 2013). Multiracial students at universities
also report adjustment issues at predominantly White universities (Ford & Malaney, 2012). In a qualitative
study of multiracial college students, participants reported prejudice and discriminatory experiences,
including being exoticized, racial essentialization, and having a racial identity imposed on them by others
(“external imposition”; Museus, Lambe Sariñana, Yee, & Robinson, 2016). “Forced-choice dilemmas” can
drive identity. One study examining U.S. Census data found Asian-Whites identifying as multiracial, but
they would identify as White if pressed to choose a single race (Gullickson & Morning, 2011). Another found that biracial adolescents may choose to identify with their minority race when forced to choose a single category (Herman, 2004). Historical factors such as hypodescent or "the one-drop rule" may also be a contributor to multiracial Black or Native Americans selecting a single race, but not so much so for part-Asians (Gullickson & Morning, 2011).

**Mental Health Over Time**

Mental health outcomes also change across the lifespan. Several longitudinal studies point to changing self-esteem based on age. Studies support the notion that self-esteem generally increases from adolescence into young adulthood (Wagner, Lüdtke, Jonkmann, & Trautwein, 2013). Another study examining self-esteem trajectories between the ages of 14 and 30 found increases in self-esteem in adolescence, but that growth in self-esteem tapers off into adulthood. Racial differences were also uncovered. Hispanics had lower self-esteem to start with compared to Whites and Blacks; self-esteem for Blacks and Hispanics eventually grew in young adulthood surpassing Whites (Erol & Orth, 2011). One study examined self-esteem over time using data from the Americans’ Changing Lives study. Data were available for a total of 3617 respondents, collected over four waves; respondents’ ages ranged from 25 to 100 years old. The authors found a quadratic relationship trajectory for self-esteem, with growing self-esteem from adulthood, and then dropping over time starting at around age 60. The authors found differences between White and Black participants, with self-esteem dropping much more rapidly among Black respondents due to socioeconomic position and self-rated health. Those with higher education levels had higher self-esteem over time compared to those with lower educational attainment at all times (Orth, Trzesniewski, & Robins, 2010). Another study conducted among members of a Southern California health maintenance organization confirmed some of these findings. Data on self-esteem were collected five times, from 1988 to 2000, from 1,824 respondents ranging in age from 14 to 104. The study found a U-shaped self-esteem trajectory over time, with no generational differences. Self-esteem increased in adolescence through adulthood, peaking at age 51, then declining in old age (Orth, Robins, & Widaman, 2012). Ecologically speaking, many factors can negatively influence self-esteem over time. Home environment, including paternal presence, poverty, and mother depression early in childhood were predictive of self-esteem later in life, but the effect diminishes over time as individuals grow older (Orth, 2017).

A number of studies have examined depression over the life course. A study using two longitudinal datasets found a non-linear relationship in depression symptoms and age: depressive symptoms were higher in early adulthood, then decreased in middle age, increasing again after age 50 (Kessler, Foster, Webster, & House, 1992), which is supported by other studies (Davey, Halverson, Zonderman, & Costa, 2004; Mirowsky & Reynolds, 2000; Orth et al., 2012). Multiple factors can contribute to depression over the lifespan, one of which is birth cohort and generational differences in depression symptoms (Lewinsohn, Rohde, Seeley, & Fischer, 1993). In looking specifically at self-esteem's relationship to depression over the lifespan, some studies point to a negative relationship
between the two. Two studies found evidence that lower or decreasing self-esteem in early adolescence was tied to higher levels of depression 20 years later (Orth et al., 2012; Steiger, Allemand, Robins, & Fend, 2014).

**Multiracial People and Mental Health**

As mentioned earlier, mental health outcomes for multiracial people is a subject of much exploration (Charmaraman, Woo, Quach, & Erkut, 2014). Examining multiracial people purely as a singular racial/ethnic group reveals mixed results for mental health outcomes. For example, studies that aggregate multiracial adolescents into a single racial category find higher rates of depression (Fisher, Reynolds, Hsu, Barnes, & Tyler, 2014; Radina & Cooney, 2000; Wong, Sugimoto-Matsuda, Chang, & Hishinuma, 2012) and higher risk for suicidal behaviors (Wong et al., 2012). One study found gender differences in depression, where multiracial boys had higher depression scores compared to whites (Cooney & Radina, 2000). Another study that used longitudinal data from Add Health found multiracial people clumped into a single group had more negative mental health outcomes compared to their White peers; however, when groups were disaggregated further by their mixed heritages, Native American-Whites had higher mental health disparities compared to Whites and other multiracial groups (Campbell & Eggerling-Boeck, 2006). Another study compared multiracial adolescents to their monoracial component groups found only Native American-Whites had higher levels of depression than their Native American or White counterparts (Schlabach, 2013). One study of multiracial Asians in Hawai‘i found this group may experience better mental health than monoracial Asians (Zhang, 2011), while another study of multiracial adolescents of various interracial parent backgrounds and monoracial-white adolescents found no differences in depression scores (Danko et al., 1997).

Mental health outcomes for monoracial Asian and Native Hawaiians living both in continental U.S. or Hawai‘i may have relevance to multiracial people in the state, as these two racial groups are the primarily larger racial groups contributing to the multiracial population. Two reviews of the literature found racial discrimination to be strongly associated with adverse mental health outcomes for Asian Americans (Gee, Ro, Shariff-Marco, & Chae, 2009; Nadimpalli & Hutchinson, 2012). Generational differences and immigration status affect the relationship between racism and stress for Asian Americans (Liu & Suyemoto, 2016). Perceived discrimination in university settings was associated with higher anxiety, depression, and somatic symptoms among Asian students (Chen, Szalacha, & Menon, 2014). Among Native Hawaiians and other Pacific Islanders, perceived racism has been linked to depression (Antonio et al., 2016).

**Multiracial Identity, Identity Statuses, and Mental Health Outcomes**

**Multiracial identities and mental health.** Adding the layer of identity development beyond just ethnic or racial identification provides another lens for examining multiracial mental health. Multiracial people identifying with their lower- or higher-status grouping tended to exhibit negative affect and higher stress levels than multiracial people who identify with their multiple identities (Binning, Unzueta, Huo, & Molina, 2009). A more recent study found similar results among biracial participants: those with more
integrated multiracial identity had higher self-esteem and lower depression versus those who did not acknowledge their biracial identities (Lusk, Taylor, Nanney, & Austin, 2010). A study comparing a small sample of Asian-Whites and Black-Whites (n=66) college students found no differences between the groups or a relationship between multiracial identity and depression; however, post-hoc tests revealed Asian-Whites that were biculturally or minority identified had less depression (Suzuki-Crumly & Hyers, 2004). Identity denial was related to lower self-esteem and lower motivation in an experiment with multiracial college students (Townsend, Markus, & Bergsieker, 2009). Changing identities depending on the social context, or malleable identity, predicted depression in a structural equation model, but this was not the case for Asian-Whites (Sanchez, Shih, & Garcia, 2009). Among younger groups, biracial adolescents who had a stronger sense of ethnic identity had higher levels of self-esteem (Bracey et al., 2004). Another study using Marginal Man as its theoretical framework found self-identified multiracial people had poorer mental health outcomes than their monoracial counterparts, and this was found consistently across all multiracial groups except American Indian-Blacks (Cheng & Lively, 2009).

Among monoracial minority groups that contribute to the Hawaii’s multiracial population, single race Asians, ethnic identity was a moderator for discrimination and health outcomes for Asian Americans, but in some cases increased the effects of discrimination or depression (Gee et al., 2009). Additionally, Asians who had higher levels of ethnic identity had worse mental health outcomes when faced with discrimination (Yip, Gee, & Takeuchi, 2008), and a study of Asian university students found that ethnic identity moderates the relationship between discrimination and somatic symptoms (Chen et al., 2014).

Measuring identity status and mental health. Phinney (1992) developed the Multigroup Ethnic Identity Measure (MEIM) to assess common components of ethnic identity. The scale has been used several times. The MEIM accounted for social identity theory and developmental theory. The MEIM examined strength of ethnic identity through attachment, pride, and feelings toward their ethnic group; identity development through exploration and commitment of an ethnic identity; and, participation in customs and traditions (Roberts et al., 1999). Phinney and others initially found a single factor-structure (Phinney & Ong, 2007), but those findings were contradicted by Roberts and colleagues (1999). Their large study using students from the Houston area to examine the structure and validity of the MEIM across ethnic groups found support for a two-factor structure matching the theoretical framework (Roberts et al., 1999). Additional studies have examined the psychometric properties of the MEIM, finding three-factor structures with Asian American students (Lee & Yoo, cited in Phinney & Ong, 2007) and among samples from the United Kingdom (Ong, Fuller-Rowell, & Phinney, 2010). Additional studies have examined measurement invariance across different ethnic groups (Feitosa, Lacerenza, Joseph, & Salas, 2017; Yap et al., 2014), answering the call of Ong and colleagues (2010) to further examine the scale for equivalence in measurement. However, in the same article, the authors critique the typical approach to examining ethnic identity as cross-sectional and highlight approaches to examine intra-individual variability to capture the dynamic process of ethnic identity (e.g., daily diaries; Ong, Fuller-Rowell, & Phinney, 2010).
Choi-Misailidis empirically tested the M-HAPA Theory in her dissertation from 2003, with data drawn from a sample of multiracial adults in Hawai‘i enrolled at three universities in the state. Convergent and discriminant validities were assessed by correlating scores from the MEIM. The final M-HAPA Scale is comprised of 43 items, with two items loading on two factors. All items are scored on a 7-point Likert scale, ranging from 1 (“strongly disagree”) to 7 (“strongly agree”) with an “unsure” option (scored as “4”). The first subscale, Marginalized Status, contains statements like “I feel disconnected from all racial groups.” Singular Status is comprised of statements such as “I wish to be identified solely as a member of one of my parents’ races.” The Integrated Identity Status—Combinatory Factor subscale has inclusive statements, like “I participate in the cultural practices of all groups in my racial heritage.” The last factor and subscale, Integrated Identity Status—Universality has more generic statements (e.g., “I feel connected to many racial groups”). Damann (2007) performed a confirmatory factor analysis to assess construct validity using the four-factor model in a sample of multiracial adults from across the U.S. The findings show a mediocre fit for the four-factor model ($\chi^2(852) = 2187; \text{ p} < .01$; comparative fit index [CFI] = .72; Tucker-Lewis Index [TLI] = .70; root mean square error of approximation [RMSEA] = .08; Damann, 2007, p. 75). Chong (2012) undertook a study utilizing a modified version of the M-HAPA Scale with a sample of 356 Asian-White early adults living in the U.S. and Canada. The modification was to account for affiliation with either a participant’s dominant or minority racial group for those who identified as a Singular Identity into a Singular-Majority status subscale and a Single-Minority status subscale. A final modified scale was comprised of 46 items based on a four-factor solution that ultimately combined the Integrated Statuses into one, the two new Singular Statuses, and retained the Marginal Status (Chong, 2012; Chong & Kuo, 2015).

Ethnic identity status has been associated with both self-esteem and depression. Phinney (1991) conceptualized the relationship between ethnic identity and self-esteem in a literature review. The review found both negative and positive evaluation of the group, both internal and external to the group, affect self-esteem. Other factors included acceptance or rejection of group membership, interested and knowledge in one’s ethnic background, and commitment to one’s ethnic group. Phinney and Chavira (1992) examined the relationship between ethnic identity and self-esteem in an exploratory longitudinal study with a small sample. The authors indicated that self-esteem and ethnic identity are interactive and suggested further longitudinal study. Roberts et al. (1999) found highly significant positive correlations between scores on the MEIM and a modified version of the Rosenberg Self-Esteem inventory (6-items) for a number of ethnic groups (European Americans = 0.24, $\text{p} < .001$; African Americans = 0.14, $\text{p} < .001$; and, Mexican Americans = 0.14, $\text{p} < .001$). Higher ethnic identity as measured by MEIM is associated with higher self-esteem (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017). Another study examining biracial Black-White adults found ethnic identity significantly correlated with self-esteem (Lusk, Taylor, Nanney, & Austin, 2010). Roberts et al. (1999) also examined the relationship between the MEIM and depression, finding a negative correlation, the strength and significance of the association varied by ethnic group (European Americans = –0.14, $\text{p} < .001$; African Americans = –0.07, $\text{p} < .05$; Mexican
Americans = −0.01, ns; and, Total: −0.09; \( p < .001 \). Higher ethnic identity attainment as measured by MEIM is associated with higher self-esteem (Fisher, Zapoliski, Sheehan, & Barnes-Najor, 2017; Lusk, Taylor, Nanney, & Austin, 2010).

The M-HAPA scale has also been used to examine the relationship between ethnic identity status and self-esteem. Choi-Misailidis (2003) correlated the four identity subscales that are part of the M-HAPA scale and found Singular and Marginal Identity Statuses were significantly negatively correlated with self-esteem, while the both Integrated Statues were significantly positively correlated with self-esteem (Choi-Misailidis, 2003). Damann (2007) used the M-HAPA Theory to predict mental health among 286 multiracial adults residing in the U.S. via an online survey. Mental health outcomes tested were self-esteem, depression, life satisfaction, and social functioning. Results indicated participants who endorsed a Marginal Identity status were more likely to report low self-esteem, depression, higher life dissatisfaction, and poorer social functioning, versus Integrated-Combinatory status, who reported better self-esteem, social functioning, and life satisfaction, and lower depression. Singular identity status was not related to any of these four outcomes; Integrated-Universality status was not associated with psychosocial functioning or life satisfaction but was correlated with self-esteem. Only the variance in social function was well explained by identity status (21%); Damann recommends caution in using these identity statuses as predictors (Damann, 2007). Chong (2012) undertook a study utilizing a modified version of the M-HAPA Scale with a sample of 356 Asian-White early adults living in the U.S. and Canada. The modification was to account for affiliation with either a participant’s dominant or minority racial group for those who identified as a Singular Identity into a Singular-Majority status subscale and a Single-Minority status subscale. Results from the study found partial support for hypotheses on psychological outcomes, namely Marginal Status predicted distress, but none of the identity statuses predicted self-esteem (Chong, 2012; Chong & Kuo, 2015).

Two other studies used the M-HAPA Theory as a theoretical framework but were qualitative and did not examine identity using the M-HAPA Scale (Fowlks, 2012; Moore, 2011). A third qualitative study examined the experiences of late adolescents and early adults of three or more races, finding that their identities had changed over time (Moore, 2011). None of these studies quantitatively examined differences in identity status by multiracial grouping.

Summary

Hawai‘i has the largest proportion of multiracial people overall and among children under 18 in the U.S. Furthermore, the state’s multiracial population is mainly comprised of three different racial groups: Asians, Native Hawaiians/other Pacific Islanders, and Whites. The ways that multiracial Native Hawaiian and Pacific Islanders individuals form an identity is underexplored. The prevailing literature has mostly examined the larger racial groups nationally (i.e., Asians, Blacks, Latinos, and Whites). This makes Hawai‘i an ideal place to research multiracial people. As identity can change over time and because of Hawaii’s unique history, applying ecological approaches to identity, such as the M-HAPA
Theory to identity formation are warranted. As mental health and identity status also change over time, the use of a longitudinal approach to explore identity and mental health over time are needed.

**Gaps: Understanding Multiracial Ethnic Identity Status and Mental Health in Hawai‘i**

A number of gaps remain in our understanding of the identity status of multiracial people via the M-HAPA Theory and identity status’s relationship with mental health outcomes. Choi-Misailidis’s (2003) original study examined adults from across three college campuses across Hawai‘i. Damann (2007) examined a sample of adults across the U.S. using M-HAPA. Chong (2012) also examined adults but used a modified version of the M-HAPA Scale. How multiracial adolescents perceive their own identities and how that may be related to mental health from an M-HAPA theoretical perspective remains unknown. Two studies have examined the relationship between identity status and self-esteem M-HAPA (Choi-Misailidis, 2003; Damann, 2007) and one examined identity status and depression (Damann, 2007), but again, these were with adults.

Second, results from studies employing the M-HAPA Theory in the above section provide an impetus for including a longitudinal perspective on multiracial identity status and contextual factors that may result in intraindividual variation in identification over time as called for by Ong, Fuller-Rowell, and Phinney (2010). In particular, the five additional identity dimensions discussed by Brunsma and colleagues (2013), including social, political, cultural, physical, and formal identities in addition to identity status, as they relate to identity development and mental health for multiracial people in Hawai‘i in our current political and social context should be further explored.

Hawai‘i is often portrayed in the literature as a state with substantial racial and ethnic harmony (McDermott & Andrade, 2011). However, the status of race and ethnic relations in Hawai‘i is complicated (Chang, 1996; Grant & Ogawa, 1993; Rohrer, 2008) and influenced by colonialism (Hall, 2008; Trask, 1992). In particular, for Native Hawaiians, the issue of multicultural harmony serves to erase the history of struggle and resistance (Okamura, 1998), while legal challenges persist, both to Hawaiian-serving institutions under the guise of “racism” (Lindsey, 2009) and within institutions of higher education (Trask, 1992). For Native Hawaiians living in Hawai‘i, the dominant multicultural narrative diminishes the underlying racial power dynamics created through importation of Chinese, Japanese, Portuguese, and other ethnic laborers during the plantation period (Edles, 2004). The use of blood quantum and a reifying of the “one-drop rule” in Hawai‘i is reflected in the way the state reports its health data for Native Hawaiians (Kaneshiro et al., 2011) and affects the distribution of Hawaiian Home Lands (Kauanui, 2008).

Historically, the racial ethnic hierarchy had its origin in the economic and political acts of white Americans (Stonequist, 1935) reflecting continental U.S. structures. Increased migration of Asian and other racial/ethnic groups during the state’s plantation era and enforced segregation on sugar plantations led to maintenance of White-driven power structures in labor, which was replicated in the state’s political power structure (Geschwender & Levine, 1983). This also coincided with high rates of intermarriages between different racial/ethnic groups in the state (Cheng & Yamamura, 1957; Fu, 2007), and increases in multiracial children, growing from 15,084 children in 1900 to 63,991 in 1950 (Cheng & Yamamura, 1957).
Haas (1987) details how the McCarran-Walter Immigration Act of 1952 enabled American residents born in Japan to become citizens. The primary result of this law was a sea-change in the state’s politics: new Japanese citizens to become the largest voting bloc in the state and resulted in Democratic Party control of the legislature. Furthermore, this voting bloc has endured, while other ethnic groups split votes along different party lines or different candidates. Levinson, Hioki, and Hotta (2015) write that while Whites in the state have maintained their economic success, while other ethnic groups, such as Japanese and Chinese, have experienced increased political and economic successes. Nascent distribution of power relegates groups, such as Native Hawaiians, toward the bottom of this hierarchy. This is reinforced within institutions (Trask, 1992). Furthermore, the social and ethnic hierarchy in Hawai‘i is further complicated by the creation of a new “local” identity (Okamura, 1998), which has evolved at the multiple intersections of ethnic identity, economic status, and generational status (Miyares, 2008). Racial hierarchies have become replicated in other ways, intersecting with economic and class hierarchies. For example, newcomer groups such as Micronesians (Palafax et al., 2011; Talmy, 2010) and Samoans (Bond & Soli, 2011) report discrimination and prejudice due to their status as recent arrivals or perceived tax burden. Campaigns such as “local jobs for local people” during the 2008 recession targeted Mexican migrants working in the construction industry in the state (Das Gupta & Haglund, 2015). How these intersecting racial/ethnic and class hierarchies may inform multiracial people’s identity development in Hawai‘i is unexplored.

**Dissertation Purpose**

As discussed above, multiracial identity status and mental health among adolescents using the M-HAPA scale is understudied. The M-HAPA scale and theory provide a sound basis to further examine how identity status affects mental health, and merits further use in examining this overarching dissertation question: “How do multiracial identity statuses affect mental health in Hawai‘i?” This question is important to explore as multiracial people in Hawai‘i are understudied even though it has the largest multiracial population in the country. Hawai‘i also has unique historical and social circumstances that may affect identity development and mental health differently from multiracial people on the U.S. mainland. This dissertation addresses this question in three different ways. The first study examined the identity statuses of a sample of multiracial adolescents in Hawai‘i by examining the psychometric properties of the M-HAPA scale. The second study examined how identity status was related to self-esteem and depression for Hawai‘i adolescents. Due to differences in historical, social, and cultural identities of the many multiracial groups living in Hawai‘i, the third study fills a gap in our knowledge of multiracial identity status, the dynamics of identity status, and mental health over time through a qualitative study using a “lifeline method.” Together, these studies provide insights into how identity affects multiracial mental health both in adolescents and over time.

**Conceptual Model**

The conceptual model for this dissertation uses a modified model of racism and health as developed by Williams and Mohammed (2013a). Figure 1.1 shows a modified framework that only shows
factors related to mental health outcomes (physical health-related constructs removed were “physiological responses” from under “Responses,” and “morbidity,” “mortality,” and “positive health” from “Health”). The model provides a clear pathway between the “basic causes” of mental health, both positive and negative. These basic causes include biology and geographic origins, societal institutions (e.g., political or legal), and both institutional and cultural racism. These basic causes underlie “social status,” which contains socioeconomic status, race, and other status markers, including age and gender. “Proximal pathways,” cultural transmission of negative beliefs about certain groups of people (e.g., stigma and stereotypes); stressors, including racial discrimination and racial stressors; socioeconomic opportunities (e.g., employment, income); societal resources, such as housing or medical care; and knowledge. These can contribute to “responses,” which include behavioral patterns like everyday resistance through negative health practices; psychological responses, including racial identity and self-esteem to racial identity and self-esteem; and collective and individual resistance, which can positively influence identity and self-esteem. While the model does not list “ethnic identity” specifically, Williams and Mohammed discuss how race and ethnicity affect health outcomes. At the end of the model, mental health manifests itself. While
this framework is deficits based, a follow-up article by the same authors provides ideas on interventions to ameliorate the effects of racism on health (Williams & Mohammed, 2013b). For example, collective acts of resistance could theoretically act to increase positive racial/ethnic identity, which would have an effect on self-esteem as well, leading to positive mental health outcomes. Increased education about history, culture, and achievement could work under socioeconomic opportunities or increase knowledge under proximal pathways, therefore providing positive responses and health outcomes. Each of the studies in this dissertation examines different parts of the Williams and Mohammed (2013a) framework. Study 1 examined racial identity under “psychological responses,” while Study 2 examined some underlying factors that influence identity, self-esteem, and depression. Lastly, Study 3 explores what key events in a multiracial person’s life may have affected their identity which covers the entire conceptual model.

Research Questions

Research question 1 and methods. Researchers have worked in the field of identity status over the last few decades, notably Phinney (1989), and Rockquemore and Brunsma (2002). Additionally, Choi-Misailidis (2003) developed the M-HAPA Theory and accompanying scale after an exhaustive literature review of the psychology literature on ethnic and multiracial identity theories in concert with focus groups. The resulting M-HAPA scale was created to measure multiracial identity specifically, unlike other primary ethnic identity assessment instrument, the MEIM. Thus far, the scale has only been used in either its original (Choi-Misailidis, 2003; Damann, 2007; Zamora, 2014) or in an altered form (Chong, 2012; Villegas-Gold, 2016) with adults. The research question for Study 1 was “Are Hawai‘i multiracial adolescent identity statuses the same as adults?” The corresponding hypothesis for this study is Hawai‘i adolescents will endorse a four-factor identity status structure, reflecting findings in Choi-Misailidis (2003) and Damann (2007). This study examined only the racial identity factor under “psychological responses” in the racism and health model (see Figure 1.1).

A secondary analysis of data collected by the University of Hawai‘i at Mānoa John A. Burns School of Medicine’s Department of Psychiatry (DOP) as part of its Pacific Peoples’ Mental Health Research Support Program (PPMHRSP) was conducted. The program collected data using the Hawai‘i Adolescent Behavioral Survey, completed by a total of 1,172 adolescents across 12 intermediate and high schools in the state. Respondents answered 43 questions related to the M-HAPA Scale. To confirm the factor structure, iterative exploratory factor analyses and confirmatory factor analyses were conducted on a split set of the data, along with other psychometric testing. Results and discussion from this study are in Chapter 2.

Research question 2 and methods. Generally, studies examining multiracial people find poorer overall mental health (Cheng & Lively, 2009; Fisher et al., 2014; Radina & Cooney, 2000; Wong et al., 2012). Biracial adolescents who had a stronger sense of ethnic identity had higher levels of self-esteem (Bracey et al., 2004). In terms of existing measures of ethnic identity, the MEIM has been used several times in relation to self-esteem (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017; Lusk, Taylor, Nanney, & Austin, 2010; Roberts et al., 1999) and higher scores of ethnic identity were negatively correlated with
depression (Roberts et al., 1999). With regard to identity statuses measured by M-HAPA and self-esteem, only two studies have correlated identity statuses with self-esteem (Choi-Misailidis, 2003; Damann, 2007). A third study (Chong, 2012) used a modified version of the M-HAPA scale to predict self-esteem. Choi-Misailidis (2003) correlated the four identity subscales that are part of the M-HAPA scale and found Singular and Marginal Identity Statuses were significantly negatively correlated with self-esteem, while the both Integrated Statuses were significantly positively correlated with self-esteem (Choi-Misailidis, 2003). Damann (2007) used the M-HAPA Theory to predict self-esteem and depression. Results indicated participants who endorsed a Marginal Identity status were more likely to report low self-esteem and depression versus Integrated-Combinatory status, who reported better self-esteem and lower depression. Singular identity status was not related to self-esteem or depression; Integrated-Universality status was positively correlated with self-esteem.

Thus far, the M-HAPA Scale has not been used to examine the identity status of adolescents in relation to self-esteem or depression. The research question for Study 2 asks “Are Hawai’i adolescent multiracial identities related to self-esteem and/or depression using the racism and health theoretical framework?” Figure 1.2 describes the underlying framework for Study 2 along with the covariates for this
study. The same dataset from Study 1 was used in this study, following the identity structure endorsed by the adolescents built from the M-HAPA Scale. Study participants also answered ten questions that comprise the Rosenberg Self-Esteem Scale (RSES) and ten questions that comprise the Center for Epidemiologic Study-Depression (CES-D) scale. Covariates in this study included age, gender, main income earner’s education level, and ancestry. Results and discussion of this study are further detailed in Chapter 3.

**Research question 3 and methods.** While Studies 1 and 2 will fill a gap in identity status for adolescents adding to what we know regarding identity status for adults (Choi-Misailidis, 2003; Chong, 2012; Damann, 2007), more must be done to understand the dynamic process of identity statuses over time. Ethnic identity is formed over time (Ford & Harawa, 2010). However, cross sectional studies only present a single point in time and do not provide ecological context for ethnic identity, what Ong, Fuller-Rowell, and Phinney (2010) termed “as a dynamic process that plays out in everyday life” (p. 46). Ecological approaches to multiracial identity formation theorize that multiracial people may develop an identity based on context and not follow a linear path with an optimal identity achievement (Rockquemore, Brunsm, & Delgado, 2009). The third research question asks, “What were key events in a multiracial person’s life related to their ethnic identity, and how did that relate to mental health?”

The third study employed a “lifeline” methodology that combined visual life histories (Gramling & Carr, 2004) and “life stories” (Guo, Klevan, & McAdams, 2016). Participants were asked to identify and talk about key events over their lives that influenced their ethnic identity. Participants rated events in order of importance to their identity development, of which three or four were selected for discussion using a semi-structured interview guide. Participants explored similar issues reflected across the dissertation conceptual model for the dissertation (Figure 1.1), though it is expected participants may cover portions of the Williams & Mohammed (2013a) model of racism and health not included in the dissertation conceptual model. This study is reported in Chapter 4.

**Community Partners**

Community partners for this study included JABSOM DOP and the Office of Public Health Studies (OPHS) at UH Mānoa. DOP provide the dataset for the first two studies of this dissertation. OPHS provided facilities to conduct the qualitative study. Faculty and students from both JABSOM DOP and OPHS kindly forwarded the call for participants in the third study to their personal and professional networks. Lastly, this study was supported by the University of Hawai‘i Foundation.

**Expected Findings**

The findings from these studies were expected to be as follows: (1) a confirmed factor structure for ethnic identity statuses for multiracial adolescents living in Hawai‘i; (2) a model of how identity status, self-esteem, and depression are related; (3) a better understanding of how key events can influence multiracial people’s identities over time and how these are related to mental health. There are a number of expected public health implications for these studies. At an individual level, those who undertake cultural or ethnic tailoring of interventions following prescribed best practices (Kreuter, Lukwago,
Bucholtz, Clark, & Sanders-Thompson, 2003) may want to consider the salience of interventions for multiracial people who may not identify with the target populations for these interventions. Practitioners may want to consider assessing identity status. In addition, for multiracial people who may feel marginalized in their identity, emphasizing intervention tailoring that increases the empowerment of marginalized individuals may be warranted. Other implications from these studies may also relate to creating interventions that affect the distal causes of poor mental and physical health as outlined in the racism and health framework (Williams & Mohammed, 2013a). Interventions may also need to occur at higher levels of the ecological model (McLeroy, Bibeau, Steckler, & Glanz, 1988), such as policies regarding racism and discrimination, or institutional level interventions in the school system. Lastly, the life course perspective of study three may indicate that interventions need to be mindful of the different time periods in a multiracial person's life that may require interventions at an interpersonal level of the ecological model (e.g., families). Thus, these three studies collectively may provide information salient to program planners who wish to consider the effect of culture, community, and the life course when developing interventions.
CHAPTER 2. AN ASSESSMENT OF THE PSYCHOMETRIC PROPERTIES OF THE MULTIRACIAL-HERITAGE AWARENESS AND PERSONAL AFFILIATION SCALE AMONG HAWAIʻI ADOLESCENTS

Abstract

Introduction: Multiracial people comprise a large percentage of Hawaii’s population, and 41.5% of youth in the state are multiracial. Ecological theories of multiracial people’s identity statuses posit these identities change over time in response to a number of internal and external factors. This study examined the psychometric properties of the Multiracial Heritage Awareness and Personal Affiliation (M-HAPA) Scale (43 items) based on one ecological theory of multiracial identity statuses. Methods: Data from the University of Hawaiʻi at Mānoa John A. Burns School of Medicine’s Department of Psychiatry Pacific Peoples’ Mental Health Research Support Program were analyzed in this study. Identity statuses were examined using cross-validation exploratory and confirmatory factor analyses (EFA and CFA). Additional psychometric tests were conducted to examine scale consistency, reliability, and convergent and divergent validity. A total of 873 multiracial adolescents were included in the sample. Results: An initial CFA failed to confirm the original theorized four identity statuses with this sample. EFAs on half of the sample were conducted using geomin rotation and two-factor loading cutoff (.3 and .4). Four- and five-factor solutions using categorical scores were found to have the best fit and were further examined using CFA. The best-fit CFA (RMSEA = .059; CFI = .95; TLI = .94) had five identity factors on 26 items, which had good internal consistency, reliability, and validity. Discussion: This study of multiracial identity status found support for five different identity statuses for adolescents living in Hawaiʻi. A new status—Appreciation—was identified, while another previously confirmed status—Marginalized—was split along two subscales (Externally and Internally Marginalized). More research is needed to understand the differences in between adolescents’ and adults’ identities. This study found support for using the M-HAPA Scale to assess multiracial people’s identity status.

Introduction

The population of multiracial people, or those who identify as two or more races, in the United States is on the increase. Demographers estimate that the multiracial population will grow by 226% by 2060, increasing from 8 million to 26 million people (Colby & Ortman, 2015). Hawaiʻi is a state that already has a sizable population of multiracial people owing to the State’s history and migratory patterns of laborers during the plantation era. According to U.S. Census data, nearly one-quarter of the state is of two or more races (Krogstad, 2015). Recent estimates from the American Community Survey indicate 41.5% youth under the age of 18 in Hawaiʻi are multiracial (U.S. Census Bureau, 2017). State agencies identify multiracial people living the state differently. For example, state-level health data may use algorithms to fit people into monoracial or monoethnic categories based on certain ancestral characteristics (e.g., any report of Native Hawaiian ancestry is categorized as Native Hawaiian) or via blood quantum (a calculated percentage of ancestry) (Kaneshiro, Geling, Gellert, & Millar, 2011). These data collection and reporting methods mask how multiracial people may actually identify which has implications for psychology and public health interventions in terms of cultural affiliation.
How multiracial people develop an identity has been the subject of much research. Different theories have been developed to explain the process of racial and ethnic identity development of multiracial people (Shih & Sanchez, 2009). Rockquemore, Brunsma, and Delgado (2009) classified existing ethnic identity formation theory approaches for biracial and multiracial people in four ways. Three of the four approaches are more linear (problem, equivalent, and variant approaches), whereas the last approach (ecological approach) is non-linear. The “problem approach” views multiracial status as problematic due to living in a world of racial hierarchies. Most well-known among these were Park’s “Marginal Man” theory (as cited in Rockquemore, Brunsma, & Delgado, 2009, p. 16) and Stonequist’s linear expansion of Park’s theory, starting with an introduction to both parents’ races and marginalization, a crisis, punctuated by cultural conflict, and ending with adjustment (as cited in Rockquemore, Brunsma, & Delgado, 2009, p. 16). The “equivalent approach” is so named since it follows prevailing thought at the time that biracial Black-White people would develop a Black identity. These approaches include Erikson’s model of ego formation, wherein multiracial people go through several stages linearly, resulting in a commitment to an identity (as cited in Rockquemore, Brunsma, & Delgado, 2009, p. 17) and Cross’s Nigresence model, which also follows stages (as cited in Rockquemore, Brunsma, & Delgado, 2009, pp. 17-18). The third approach or “variant approach” theorizes that biracial and multiracial people work to construct an identity that integrates either “biracial” or “multiracial” from a multidisciplinary approach. Most well-known is Poston’s biracial identity development model (as cited in Rockquemore, Brunsma, & Delgado, 2009, p. 18), which is discussed further below. The last category, the “ecological approach,” posits multiracial identity as context-specific, lacks discernable, predictable identity stages, and by identifying a particular identity status as better than another replicates the limitations of the existing linear theories (i.e., identity achievement). A limitation to linear theories is they terminate with the selection of an identity, whereas ecological theories allow multiracial people to embrace or reject any racial/ethnic identity or identities. Root’s ecological framework for understanding multiracial identity, which uses the idea of “border crossings” out of social locations for multiracial people from an intersectional perspective, is one such ecological approach (as cited in Rockquemore, Brunsma, & Delgado, 2009, p. 19).

**Linear identity theories and empirical analysis**

In addition to linear-type identity theories discussed above, another well-known linear model is Phinney’s (1989) model of ethnic identity development. Four identity status’ were theorized: diffuse, with no exploration or understanding of identity; foreclosed, with some identity exploration with either positive or negative feelings regarding identity based on socialization; moratorium, involving identity exploration, but confusion over its meaning; and finally achieve, where exploration is complete, and understanding and acceptance of identity is achieved (Phinney, 1989, p. 38). This theory was empirically examined among 91 high schoolers, during which time, researchers were unable to code for the theorized “diffused” or “foreclosed” statuses, which led to the creation of a single “unexamined” category (Phinney & Chavira, 1992). Over half of the sample had a diffused or foreclosed identity status, while 22.9% had a moratorium status, and 21.3% had an achieved status. While there were no significant differences between ethnic
groups on stages of development, over half (53.3%) of Asian American respondents indicated that they would have preferred to have been White, compared to only 12.0% of Black and 8.7% of Hispanic participants (Phinney, 1989). An exploratory longitudinal follow up study with 18 of the original to examine whether subjects progressed linearly according to the ethnic identity formation theory found one of the eight participants who had been in an unexamined status remained unexamined, two moved to moratorium, and five had identity achievement. Interestingly, two male participants, one Asian and one Hispanic had regressed in their identity statuses from either moratorium or achieved to unexamined (Phinney & Chavira, 1992). These status types have been combined with other measures of ethnic participation in the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). The MEIM has been used in a number of different studies with adolescents (Phinney, 1992; Phinney, Chavira, & Tate, 1993; Roberts et al., 1999).

Two other models, similar to Phinney’s and specific to biracial and multiracial development are linear. Poston’s (1990) 5-stage model of biracial identity development includes personal identity, choice of identity, “enmeshment/denial,” appreciation, then integration. Personal identity is where a multiracial or biracial person has no sense of their ethnic background. In choice of identity, an individual is pushed to identify as one group, which is informed by any number of contexts like status factors (e.g., ethnic background, socioeconomic status or neighborhood composition), support factors (e.g., parental and group influence and acceptance), and personal factors (e.g., phenotype, additional language acquisition). “Enmeshment/denial” involves confusion, guilt, self-hatred and denial of group membership. When a multiracial person learns more about their other backgrounds or participates in socio-cultural activities, they enter appreciation, which is followed by the fifth and final stage, integration. A second model of multiracial development (Kich as cited in Choi-Misailidis, 2003) has only three stages, theorized to occur during different age ranges. Between ages 3 and 10, a multiracial person would experience an “awareness of differentness,” characterized by social comparison. Second is a “struggle for acceptance” starting around age 8 through late adolescence, including experimenting with different racial identities. The model concludes with an integration of identities in late adolescence or early adulthood.

Ecological approaches to identity formation and empirical analyses

Root’s (1998) ecologically-informed theory of identity formation included different layers that could inform a multiracial person’s identity. Most outer layers included gender, the historical contexts for race relations in the region in which individuals were from, and socioeconomic position. Additional lenses included inherited influences, such as parents’ identity, languages spoken in the home, phenotype, and family identity. Second were traits, which included temperament and skills related to society and coping. Next is a generational layer; embedded in this layer were social interactions in a community, across intrapersonal, community, and institutional relationships. Racial and ethnic identities were also embedded in the generational layer.

Rockquemore & Brunsma (2002) developed a multidimensional model of biracial identity through an examination of Black-White biracials. They identified four different identity statuses: a singular identity
(exclusively one race or another), a border identity (a unique category using both races), a protean identity (changing between Black, White, or biracial depending on situation), and transcendent, or “human” identity based on no definable characteristics (Rockquemore & Brunsma, 2002). Brunsma, Delgado, and Rockquemore (2013) further expanded the multidimensional model with the addition of identity dimensions contributing to ethnic identity for Black-white multiracial people to include social, political, cultural, physical, and formal identities, leading to the development of a complex identity matrix. A newer study further expanded on the original Rockquemore and Brunsma (2002) four identity types to include internal and external validation of identity and included Asian-white people in the sample. Results from this study indicated differences in self-identity for Asian-white and Black-white respondents. Black-white participants most often selected a validated border identity, while Asian-white participants used a protean identity more often. The authors point out that social circumstance and relationships may contribute to why Asian-white people picked a protean identity (Lou, Lalonde, & Wilson, 2011). The authors conducted a similar study, subdividing Asian-white participants into geographically split categories of South Asian-white and East Asian-white. In this study, East Asians-white participants selected a protean identity more often, while South Asian-white participants identified with having an unvalidated border identity, that is, holding a biracial identification while others do not accept biracial as a valid categorization (Lou & Lalonde, 2015).

Choi-Misailidis (2003) critically analyzed gaps in other biracial and multiracial identity theories. She discussed three different models, including Kich and Poston’s linear models discussed above. The last model she examined was Root’s, which concentrated on identity resolution rather than processes as proposed by Kich and Poston. Root theorized four resolution statuses of acceptance of a societally assigned identity, identifying with both parents’ racial groups, identifying with a single racial group, or identification with a new group (as cited in Choi-Misailidis, 2003). Issues identified with these theories included pathologizing those without integrated identities, a lack of accounting for the possible fluidity of multiracial identity, or accounting for those who feel marginalized (p. 29). This led to the development of the Multiracial-Heritage Awareness and Personal Affiliation (M-HAPA) theory, which shares some characteristics of Rockquemore & Brunsma (2002).

The M-HAPA theory helps to solve some of the issues with prevailing linear models of ethnic identity formation. As conceptualized by Choi-Misailidis (2003), M-HAPA allows for assertion of identity depending on the situation. The theory posits that individuals hold both an internal multiracial identity, comprised of an internal personal awareness of one’s ancestry, and an external identification with one’s racial or ethnic groups. Examples of personal awareness include feelings, sense of belonging, or attitudes towards one’s groups. External identification includes racial reporting on forms or participation in cultural events. These factors closely align with the socio-ecological influences introduced earlier. The theory hypothesizes the closer these two components are to one another, the better the mental health outcomes.
M-HAPA Scale Development and Testing

Choi-Misailidis (2003) empirically tested the M-HAPA theory using the M-HAPA Scale with 364 adults residing in Hawai‘i who identified as multiracial. Through factor analysis (principal component analysis and common factor analysis), Choi-Misailidis identified three identity statuses: Marginal Identity Status, Singular Identity Status, and Integrated Identity Status (Choi-Misailidis, 2009; p. 303). Marginalized Status includes separation of all aspects of one’s heritages. Singular Identity Status pertains to an individual’s alignment with one particular ethnic or heritage group. The last status, Integrated Identity Status, was further subdivided into two subfactors, a “combinatory” factor wherein individuals identified with both parents’ heritages, and a “universality” factor. The Integrated-Universality identity status has individuals identifying with a variety of racial groups. The final scale used 43 items (Choi-Misailidis, 2009).

Furthermore, the M-HAPA Scale was empirically tested twice more. Damann (2007) retained all 43 items from the original scale and tested the scale with 268 adults residing across the U.S. The sample was mostly women (85.4%) and had some level of college education (63.9%). This study used a confirmatory factor analysis with the full dataset. Results indicated a mediocre fit [$\chi^2(852 = 2187, p < .01$, comparative fit index = .72, Tucker-Lewis Index = .70, root mean square error of approximation = .08]. Another study (Chong & Kuo, 2015) modified the items from the M-HAPA Scale significantly to examine identities of Asian-white multiracial adults in the US and Canada. Because of the modifications to items, this study’s findings are not directly comparable to Damann (2007) or Choi-Misailidis (2003).

The Current Study

While other studies have examined adolescents’ ethnic and racial identities—including multiracial adolescents—using the MEIM (Roberts et al., 1999), the MEIM measures achievement of identity which problematizes other types of identities, as critiqued by Choi-Misailidis (2003). Thus far, the M-HAPA Scale has yet to be empirically tested among multiracial adolescents. By examining multiracial adolescents’ identity statuses, we can better understand those identities and related issues, such as mental health. This is important as ecological identity statuses have mainly been developed or tested with college students or adults (Choi-Misailidis, 2003; Damann, 2007; Rockquemore & Brunsma, 2002; Root, 1998), and adolescents may have other types of identities due to factors such as age or birth cohort. Furthermore, this study can provide an alternative measure of multiracial identity status, supplementing other existing measures (e.g., MEIM). The purpose of this study was to examine whether Hawai‘i multiracial adolescents would endorse a four-factor identity status similar to multiracial adults residing in the state as in the original empirical test of the M-HAPA Scale by Choi-Misailidis (2003) using a confirmatory factor analysis (CFA). If the CFA indicated the hypothesized four-factor had a poor fit, exploratory factor analysis (EFA) and additional psychometric testing of the M-HAPA Scale would be conducted.
Methods

Study Population

This study used a data previously collected by the University of Hawai‘i at Mānoa John A. Burns School of Medicine’s Department of Psychiatry (DOP) as part of its Pacific Peoples’ Mental Health Research Support Program (PPMHRSP). During the program, DOP collected data via the Hawai‘i Adolescent Behavioral Survey (HABS) at 12 intermediate and high schools in the state. Presentations about the PPMHRSP project were conducted at each site. Students from the 8th and 12th grades were randomly selected for participation to increase the generalizability of study findings. Native Hawaiian students were purposefully oversampled to answer other research questions as part of the PPMHRSP. Participants were recruited over three years from September 2001 through May 2004 during the school year. A random selection of students was generated via enrollment lists. Assent procedures were used to gauge student interest in participating in the study, and parents of interested students were provided consent forms to complete the recruitment process. Students were compensated for their participation in the HABS (between $5 and $10). Time 1 of the HABS was administered to students in the 8th and 12th grades. Only data from Time 1 were used for this study. A total of 1,172 students participated, of which 1,129 completed the HABS. Participants’ racial groups were determined by parents’ reported ethnicities, reported further below. Only students who were multiracial were retained for this study. A total of 873 respondents were identified as multiracial. The racial groups of the participants are reported in Table 2.1.

Measures

Demographic measures. Race and ethnicity variables were composited using both parents’ ethnicities. Ethnic and racial choices were Hawaiian, Japanese, Filipino, Korean, Samoan, Black, Puerto Rican, Chinese, Caucasian, Portuguese, Hispanic, Tongan, American Indian/Alaska Native, other Asian, other Pacific Islander, or don’t know. Composite ethnicities were American Indian/Alaska Native, Black, Caucasian, Filipino, any Hawaiian (part or full), Hispanic, Japanese, Korean, mixed non-Hawaiian, other, other Pacific Islander, Portuguese, Puerto Rican, Samoan, or Tongan. Possible choices were Hawaiian, Japanese, Filipino, Korean, Samoan, Black, Puerto Rican, Chinese, Caucasian, Portuguese, Hispanic, Tongan, American Indian/Alaska Native, other Asian, other Pacific Islander, any other, or don’t know.

For purposes of this study, ethnic groups were converted to racial groups by following the guidelines of the Office of Management and Budget (1997). Those classified as Caucasian and/or Portuguese were grouped into white. Those who were classified as Chinese, Filipino, Japanese, Korean, and/or other Asian were grouped into Asian. The Native Hawaiian and other Pacific Islander (NHOPI) group included Native Hawaiians, Samoans, Tongans, and/or other Pacific Islander groups, as Samoans, Tongans and other Pacific Islanders had small counts (combined n=68). Latinos were combined from those who were identified as Hispanic and/or Puerto Rican. Finally, an “other” category combined the least frequently reported groups of Black or African American, American Indian/Alaska Native, and/or don’t know.
M-HAPA Scale (Choi-Misailidis, 2003). The primary measures of interest were from the M-HAPA Scale, a 43-item battery scored using a 7-point Likert scale (1 = “Strongly Disagree,” 4 = “Unsure,” and 7 = “Strongly Agree”). During scale development, Choi-Misailidis recruited a sample of 364 Hawai‘i-based college students who identified as multiracial by indicating their parental racial groups. An exploratory factor analysis was conducted on the items using a 0.3 factor loading cutoff. Solutions were rotated in a number of ways. A varimax (orthogonal) rotation supported a four-factor solution. The final factors identified were Marginalized Identity Status (α = .83), Singular Identity Status (α = .85), Integrated Identity Status—Combinatory (α = .83), and Integrated Identity Status—Universality (α = .71). The Marginalized Status included 13 items, such as, “I do not like it when people ask me about my racial heritage” (Item 17), and “People see me differently than I see myself” (Item 33). The 13-item Singular

Table 2.1: Racial Demographics of Participants by Completion of the Multiracial-Heritage Awareness and Personal Affiliation Scale

<table>
<thead>
<tr>
<th>Multiracial Category</th>
<th>Did not answer any questions</th>
<th>Completed all or some questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td><strong>Two Racial Groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White-Asian</td>
<td>19 (8.56)</td>
<td>57 (8.76)</td>
<td>76 (8.71)</td>
</tr>
<tr>
<td>White-NHOPI</td>
<td>17 (7.66)</td>
<td>24 (3.69)</td>
<td>41 (4.7)</td>
</tr>
<tr>
<td>White-Other</td>
<td>3 (1.35)</td>
<td>11 (1.69)</td>
<td>14 (1.6)</td>
</tr>
<tr>
<td>White-Latino</td>
<td>1 (0.45)</td>
<td>8 (1.23)</td>
<td>9 (1.03)</td>
</tr>
<tr>
<td>Asian-NHOPI</td>
<td>28 (12.61)</td>
<td>78 (11.98)</td>
<td>106 (12.14)</td>
</tr>
<tr>
<td>Asian-Other</td>
<td>2 (0.9)</td>
<td>2 (0.31)</td>
<td>4 (0.46)</td>
</tr>
<tr>
<td>Asian-Latino</td>
<td>2 (0.9)</td>
<td>14 (2.15)</td>
<td>16 (1.83)</td>
</tr>
<tr>
<td>NHOPI-Other</td>
<td>1 (0.45)</td>
<td>3 (0.46)</td>
<td>4 (0.46)</td>
</tr>
<tr>
<td>NHOPI-Latino</td>
<td>1 (0.45)</td>
<td>5 (0.77)</td>
<td>6 (0.69)</td>
</tr>
<tr>
<td><strong>Three Racial Groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White-Asian-NHOPI</td>
<td>78 (35.14)</td>
<td>214 (32.87)</td>
<td>292 (33.45)</td>
</tr>
<tr>
<td>White-Asian-Other</td>
<td>2 (0.9)</td>
<td>8 (1.23)</td>
<td>10 (1.15)</td>
</tr>
<tr>
<td>White-Asian-Latino</td>
<td>3 (1.35)</td>
<td>26 (3.99)</td>
<td>29 (3.32)</td>
</tr>
<tr>
<td>White-NHOPI-Other</td>
<td>4 (1.8)</td>
<td>8 (1.23)</td>
<td>12 (1.37)</td>
</tr>
<tr>
<td>White-NHOPI-Latino</td>
<td>3 (1.35)</td>
<td>9 (1.38)</td>
<td>12 (1.37)</td>
</tr>
<tr>
<td>White-Other-Latino</td>
<td>3 (1.35)</td>
<td>2 (0.31)</td>
<td>5 (0.57)</td>
</tr>
<tr>
<td>Asian-NHOPI-Latino</td>
<td>5 (2.25)</td>
<td>14 (2.15)</td>
<td>19 (2.18)</td>
</tr>
<tr>
<td>Asian-NHOPI-Other</td>
<td>5 (2.25)</td>
<td>4 (0.61)</td>
<td>9 (1.03)</td>
</tr>
<tr>
<td>Asian-Other-Latino</td>
<td>0 (0)</td>
<td>2 (0.31)</td>
<td>2 (0.23)</td>
</tr>
<tr>
<td>NHOPI-Other-Latino</td>
<td>2 (0.9)</td>
<td>2 (0.31)</td>
<td>4 (0.46)</td>
</tr>
<tr>
<td><strong>Four or More Racial Groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian-NHOPI-Other-Latino</td>
<td>2 (0.9)</td>
<td>4 (0.61)</td>
<td>6 (0.69)</td>
</tr>
<tr>
<td>White-NHOPI-Other-Latino</td>
<td>2 (0.9)</td>
<td>4 (0.61)</td>
<td>6 (0.69)</td>
</tr>
<tr>
<td>White-Asian-Other-Latino</td>
<td>3 (1.35)</td>
<td>8 (1.23)</td>
<td>11 (1.26)</td>
</tr>
<tr>
<td>White-Asian-NHOPI-Latino</td>
<td>18 (8.11)</td>
<td>67 (10.29)</td>
<td>85 (9.74)</td>
</tr>
<tr>
<td>White-Asian-NHOPI-Other</td>
<td>11 (4.95)</td>
<td>35 (5.38)</td>
<td>46 (5.27)</td>
</tr>
<tr>
<td>White-Asian-NHOPI-Latino</td>
<td>7 (3.15)</td>
<td>42 (6.45)</td>
<td>49 (5.61)</td>
</tr>
</tbody>
</table>

aMissing scores were imputed in both exploratory and confirmatory factor analyses using maximum likelihood (MLR) and weighted least squares (WLSMV) estimators in Mplus 7.4.

bRacial groups were created from parental ethnic groups. Ethnic groups were categorized using guidance from the Office of Management and Budget (1997)

cNative Hawaiian/other Pacific Islander
Status contained statements like, “I want to be accepted by a particular group” (Item 14) and “I solely participate in the cultural practices of one racial group” (Item 25). Integrated Identity Status—Combinatory included 10 items, such as “Being mixed race, I appreciate both my mother’s and father’s racial heritages” (Item 13), while the Integrated Identity Status—Universality factor included 9 items, such as, “I am open to being a member of many groups” (Item 3). Two items, “I am proud of my mixed-race heritage” (Item 14) and “When people question me about my heritage, I explain my complete racial lineages” (Item 40) cross-loaded onto the two Integrated Statuses. Of the studies that used the scale or theory, Damann’s (2007) was the only one to report factor loadings and goodness-of-fit statistics. Cronbach’s alphas reported by Damann were similar to Choi-Misailidis’s original study: .83 for Singular Identity Status, .85 for Marginal Identity Status, .87 for Integrated Identity Status—Combinatory, and .77 for Integrated Identity Status—Universality. Damann’s study found the overall four-factor model had mediocre fit ($\chi^2[852] = 2187, p > .01$; comparative fit index [CFI] = .72; Tucker-Lewis Index [TLI] = .70; and root mean square error of approximation [RMSEA] = .08).

Data Analyses

A reduced dataset was developed to include only those who were identified as multiracial by excluding those who were white, Asian, NHOP, Latino, or Other only. The reduced dataset and descriptive statistics of the analytic dataset were produced using Stata 15.1 (StataCorp, College Station, TX). A CFA following the M-HAPA theory proposed by Choi-Misailidis (2003) was performed using scores of the analytic dataset using Mplus 7.4 (Muthen & Muthen, Los Angeles, CA). Both continuous scores and categorical scores were tested. Missing scores were imputed by using the appropriate robust estimator, maximum likelihood (MLR) for continuous scores, and weighted least squares (WLSMV) for categorical scores. As explained above, if the CFA did not indicate a good fit, cross-validation EFA methods would be used to examine the factor structure of the items for Hawai‘i-based adolescent sample, followed by a CFA if appropriate. Fit was assessed using three different scores: RMSEA, CFI, and TLI. Cutoffs for goodness-of-fit indices followed suggestions by Schreiber, Stage, King, Nora, and Barlow (2006) of RMSEA <.06-.08, CFI ≥ .95, and TLI ≥ .95 for continuous data and RMSEA <.06, CFI ≥ .95, and TLI ≥ .96 for categorical data, although others recommend not rejecting theoretically sound models solely based on arbitrary cutoff points (Niemand & Mai, 2018). Additionally, Cronbach’s alphas for each subscale to examine internal scale consistency and reliability and a correlation matrix of the factor mean scores were produced to examine convergent and divergent validity. These were performed using Stata 15.1.

Ethics Statement

This study uses secondary data from the Hawai‘i Adolescent Behavioral Survey. All included participants previously provided assent; parents of participants also provided consent under a previous University of Hawai‘i at Mānoa Institutional Review Board (#10350). This study qualified under the previously filed application.
Results

Demographic data is provided in Table 2.1 to describe the dataset. A total of 873 respondents were multiracial, of whom 222 did not answer any of the M-HAPA Scale items. Of the remaining 651 respondents who answered some or all items, nearly one-third were triracial White-Asian-NHOPI. The second largest group was Asian-NHOPI (11.98%), followed by White-Asian-NHOPI-Latino respondents (10.29%).

M-HAPA Scale scores were assessed for univariate normality. A total of 17 items were skewed higher than the recommended absolute value of 1 (Courtney & Chang, 2018) and/or approached or exceeded recommended kurtosis cutoffs of 7 (In'nami & Koizumi, 2013). These variables were tested for skewness and kurtosis normality in Stata, and all were significantly non-normal for both skewness and kurtosis. Whether the 17 items could be normalized was assessed using Tukey’s ladder of powers (StataCorp, 2013) (Stata command “ladder”) which searches for appropriate transformations (e.g., inverse, log transformation); however, no appropriate transformations were found. As nearly half of items were non-normal, models using both the raw continuous scores and categorical versions of the scores (which allowed for ordinal scales) were tested. Nine items had one or two observations that were not whole numbers (e.g., 3.5). These scores were rounded up into the next highest category for the categorical analyses.

Confirmatory Factor Analyses Based on M-HAPA Four-Factor Solution

Initial CFAs following the theorized four-factor solution using MLR and WLSMV to account for missing scores in Mplus were conducted. Measurement models did not indicate a good fit. Continuous model fits using MLR were RMSEA: 0.053 (CI90: 0.050-0.055), CFI: 0.78, and TLI: 0.76, while categorical model fits using WLSMV were RMSEA: 0.068 (CI90: 0.064-0.069), CFI: 0.87, and TLI: 0.86. One item (#41) failed to load on its factor, while two other items (#10 and #29) that were supposed to cross-load onto both Integrated factors failed to cross-load but did load onto one of the factors. The model was re-fitted by removing the non-loading item (#41), and the two items that were supposed to cross-load were retained to load on only one factor each, although this now moved toward EFA. The second measurement model still had poor fit (continuous model: RMSEA: 0.053 [CI90: 0.051-0.056], CFI: 0.78, and TLI: 0.77; categorical model: RMSEA: 0.068 [CI90: 0.068-0.070], CFI: 0.87, and TLI: 0.86). Finally, modification indices were used to examine whether the fit could be improved. Although the fit improved, the fit did not improve enough to accept either model (continuous model: RMSEA: 0.041 [CI90: 0.038-0.044], CFI: 0.89, and TLI: 0.86; categorical model: RMSEA: 0.055 [CI90: 0.052-0.057], CFI: 0.92, and TLI: 0.91).

Additionally, as Choi-Misailidis (2003) had no missing scores in her original validation study, additional CFAs were run using listwise deletion of the categorical data to ensure only those who completed the entire scale were analyzed to examine whether the results would differ. As in the CFA using imputed missing data, one item (#41) failed to load, and the two cross-loading items (#10 and #29) each only loaded on a different Integrated Status. As before, the non-loading item was removed, and items that were theorized to cross-load were assigned to only the factor they loaded on in the initial CFA.
Furthermore, modification indices were used to improve fit. The final model using categorical scores had inadequate goodness-of-fit statistics (RMSEA: 0.054 [CI90: 0.052-0.057], CFI: 0.92, and TLI: 0.91). Therefore, a four-factor solution based on the original validation study was not supported by this sample using contemporary factor analytic strategies.

Exploratory Factor Analyses and Confirmatory Factor Analysis

After the initial CFA did not indicate a good fit, the sample was split in half using random number assignment (i.e., cross-validation design). A series of EFAs were run on one half of the sample of between two to five factors, while the second half of the sample was retained for CFA once a simple factor structure was obtained that met the established goodness-of-fit statistic cutoffs. Both continuous models and categorical models were run. Two factor-loading cutoffs were set at .3 and .4, respectively, in order to eliminate non-loading items. Cross-loading items were also eliminated. These were done in order to identify the best simple factor structure. Only geomin (oblique) rotation was used in all EFAs. In total, 16 EFAs were run.

Table 2.2 provides goodness-of-fit statistics (RMSEA, CFI, and TLI) of each EFA and CFA solution. All EFAs conducted using continuous variables and robust maximum likelihood (MLR) to account for missing values did not meet the minimum goodness-of-fit criteria. Four EFAs using categorical scores and robust weighted least squares (WLSMV) had goodness-of-fit values at or near the established cutoff, each with either 4 or 5 factors and either the .3 or .4 factor-loading cutoff. The best-performing EFA solution used a .3 factor-loading cutoff, had five factors, and met the 3 goodness-of-fit cutoffs (RMSEA: 0.046, CFI: .97, and TLI: .96).

Four CFAs were run on the second half of the dataset. The 5-factor model with .3 factor-loading cutoff also had the best-performing CFA (RMSEA: .059, CFI: .95, and TLI: .94). For this CFA, the model...
<table>
<thead>
<tr>
<th>Item #</th>
<th>Question</th>
<th>EFA Standardized Loading</th>
<th>CFA Standardized Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Integrated Status (α = 0.6939)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>&quot;I do not mind when others ask me to help them understand what it means to be a multiracial person.&quot;</td>
<td>0.677 0.547</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>&quot;I am open to being a member of many groups.&quot;</td>
<td>0.663 0.681</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>&quot;I feel connected to many racial groups.&quot;</td>
<td>0.564 0.672</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>&quot;I have things in common with people of all races.&quot;</td>
<td>0.459 0.662</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>&quot;I date individuals from a variety of racial groups.&quot;</td>
<td>0.484 0.483</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>&quot;When people question me about my heritage, I explain my complete racial lineages.&quot;</td>
<td>0.332 0.453</td>
<td></td>
</tr>
<tr>
<td>Factor 2: Singular Status (α = 0.8022)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>&quot;I am more comfortable with members of my mother's (or father's) race.&quot;</td>
<td>0.674 0.364</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>&quot;I feel more loyalty to my mother's heritage.&quot;</td>
<td>0.727 0.479</td>
<td></td>
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<tr>
<td>9</td>
<td>&quot;I would like to 'pass' for a member of my mother's (or father's) racial group.&quot;</td>
<td>0.556 0.408</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>&quot;I wish to be identified solely as a member of one of my parent's races.&quot;</td>
<td>0.499 0.623</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>&quot;I feel that I am closer to my mother's race than my father's, or I feel I am closer to my father's race than my mother's.&quot;</td>
<td>0.827 0.620</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>&quot;I feel closer to the race of one parent.&quot;</td>
<td>0.778 0.795</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>&quot;I prefer to have more contact with one parent's racial group than the other.&quot;</td>
<td>0.608 0.830</td>
<td></td>
</tr>
<tr>
<td>Factor 3: Appreciation Status (α = 0.7913)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>&quot;I am proud of my mixed race heritage.&quot;</td>
<td>0.602 0.765</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>&quot;I enjoy both my mother's and father's racial heritages.&quot;</td>
<td>0.820 0.843</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>&quot;Being of mixed race, I appreciate both my mother's and father's heritages.&quot;</td>
<td>0.758 0.893</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>&quot;Both aspects of my racial heritage are an important part of who I am.&quot;</td>
<td>0.332 0.775</td>
<td></td>
</tr>
<tr>
<td>Factor 4: Externally Marginalized (α = 0.7731)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>&quot;Other people exclude me because I am racially different from them.&quot;</td>
<td>0.682 0.660</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>&quot;I feel that I am not accepted by others.&quot;</td>
<td>0.684 0.630</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>&quot;Others remind me frequently that I am different.&quot;</td>
<td>0.573 0.562</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>&quot;No one knows how I feel because I am racially different.&quot;</td>
<td>0.401 0.759</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>&quot;Other people do not accept me because I am racially different.&quot;</td>
<td>0.572 0.837</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>&quot;I do not fit in with others.&quot;</td>
<td>0.607 0.701</td>
<td></td>
</tr>
<tr>
<td>Factor 5: Internally Marginalized (α = 0.6031)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>&quot;I do not like when people ask me about my racial heritage.&quot;</td>
<td>0.507 0.690</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>&quot;I feel disconnected from all racial groups.&quot;</td>
<td>0.839 0.681</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>&quot;I feel like I am the only one I can rely on to mediate racial conflict.&quot;</td>
<td>0.352 0.429</td>
<td></td>
</tr>
</tbody>
</table>
met the minimum categorical RMSEA (< .06) and CFI (≥.95) criteria used for this study, although TLI was slightly under (≥.96 criteria versus .94 in this study). Table 2.3 provides an assessment of the final five-factor solution’s face validity, EFA standardized factor loadings, and CFA standardized factor loadings. Given that this 5-factor solution was the best-fitting CFA model and because of its meaningfulness, a more flexible approach (Niemand & Mai, 2018) to the goodness-of-fit statistics was employed and this 5-factor model was selected. A total of 26 items were retained.

Two extracted factors in this study resembled two of the original theorized factors from Choi-Misailidis’ (2003) original study, partially validating the M-HAPA Scale. The Integrated Status (6 items, α = 0.6939) in this study shared some of the same characteristics as the Integrated Status—Universality subscale in the original study, and its name was retained here for that reason. A representative item was, “I am open to being a member of many groups.” Additionally, Singular Status (7 items, α = 0.8022) in this study shared many of the same items from the original validation study. Items included statements about being more identified with one parent’s racial group (e.g., “I am more comfortable with members of my mother’s [or father’s] race”). Factor 3 more closely resembles an “Appreciation Status” (4 items, α = 0.7913) from more linear versions of ethnic identity formation theories. For example, items like, “I enjoy both my mother’s and father’s racial heritages,” and “Being of mixed race, I appreciate both my mother’s and father’s heritages,” may be indicative of a where multiracial youth participate in sociocultural activities to learn more about their cultural backgrounds (Poston, 1990). This can lead to multiracial people coming to “appreciate” both of their parent’s racial groups (Crane, 2013), which lent itself to wording in some of the items.

The Marginal Status subscale in the original validation study diverged here to internally marginalized status and an externally or forced marginalized status. The Externally Marginalized (Factor 4) status contained six items, such as, “Other people do not accept me because I am racially different” and “Others remind me frequently that I am different” (α = 0.7731). These items pointed to a situation often discussed in the literature specifically related to multiracial people. Identity denial has been documented in other studies from a variety of sources, including through forms and policies (Townsend, Markus, & Bergsieker, 2009) or by family members (Nadal, Sriken, Davidoff, Wong, & McLean, 2013), and can be enacted in a number of ways, like isolation, exclusion, or denial of multiracial experience (Nadal et al., 2011). Second, the three items in Factor 5 (α = 0.6031) indicated an Internally Marginalized status because items reflected what has been described as “separation” or “self-imposed withdrawal from society” (Berry & Kim, 1988, p. 212), such as, “I do not like when people ask me about my racial heritage” and “I feel disconnected from all racial groups.” The Cronbach alpha for the last factor, Internally Marginalized, was a bit low; however, this was at least partially due to the factor being composed of only three items (i.e., the more items, the higher the Cronbach alpha value).

A correlation matrix of the five factors using standardized means computed from the Cronbach alphas provided above is presented in Table 2.4. Integrated Status was significantly and positively related to the Appreciation Status (r = .45, p < .001), while significantly and negatively related to Singular Status.
Table 2.4: Correlation Matrix of Standardized Means from the 5-Factor Solution

<table>
<thead>
<tr>
<th></th>
<th>Integrated (Factor 1)</th>
<th>Singular (Factor 2)</th>
<th>Appreciation (Factor 3)</th>
<th>Externally Marginalized (Factor 4)</th>
<th>Internally Marginalized (Factor 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2</td>
<td>-0.14</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td>0.45</td>
<td>-0.19</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 4</td>
<td>-0.21</td>
<td>0.37</td>
<td>-0.28</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Factor 5</td>
<td>-0.30</td>
<td>0.38</td>
<td>-0.34</td>
<td>0.53</td>
<td>1</td>
</tr>
</tbody>
</table>

All correlations significant at $p < .001$

$(r = -.13, p < .001),$ Externally Marginalized Status $(r = -.21, p < .001),$ and Internally Marginalized Status $(r = -.30, p < .001).$ Singular Status was significantly and positively correlated with the two marginalized identity statuses $(r = .37, p < .001$ for Externally Marginalized and $r = .38, p < .001$ for Internally Marginalized) and was significantly and negatively correlated with Appreciation Status $(r = -.19, p < .001).$ The two marginalized identity statuses were also positively and significantly correlated $(r = .53, p < .001).$

Discussion

This study sought to validate the use of the M-HAPA Scale with a sample of multiracial adolescents residing in Hawaii using confirmatory factor analysis to test a previously theorized four-factor model. Through the CFA process, this study found that this adolescent sample did not endorse four identity statuses. Using a cross-validation approach, extensive exploratory factor analyses were then conducted to examine the underlying factor structure of the M-HAPA Scale with this sample, and a five-factor solution was found (Integrated, Singular, Appreciation, Externally Marginalized, and Internally Marginalized) and validated using CFA and the meaningfulness criterion. Cronbach’s alphas were found to be sufficient given the number of items for each factor, and the factors were found to correlate strongly by type of identity status thus confirming their convergent and divergent validities. For example, the two marginalized statuses were highly correlated with one another.

Further discussion of the differences between the original four identity statuses conceptualized by Choi-Misailidis (2003) versus the five identity statuses found in the present study is warranted. This study’s results of the extensive EFA and CFA suggest adolescents may have an appreciation identity status, which differs from the original M-HAPA validation study (Choi-Misailidis, 2003). The Appreciation Status could also resemble what Phinney and Ong (2007) termed as a “foreclosed” identity status or an identity commitment without extensive exploration of what that identity means and can include the influence of parents over the identity of their child. In the present study, two items related to appreciation status were related specifically to parents (“I enjoy both my mother’s and father’s racial heritages” and “Being of mixed race, I appreciate both my mother’s and father’s heritages”). While these two items suggest that parental influence may be at play, this study did not empirically test whether participants had explored meaning in their identity. Furthermore, two other items included in the Appreciation factor (“I am proud of my mixed race heritage” and “Both aspects of my racial heritage are an important part of who I am”) may imply an integrated identity. These two items may also be related to possible external validation.
or encouragement from parents. Poston’s (1990) identity theory is also helpful in that it theorizes an appreciation status that comes after struggle (Crane, 2013), but the items which load on this factor also include parental influence. Qualitative studies with adolescents in Hawai‘i should be undertaken to better understand this Appreciation identity status.

In the present study, the marginalized status was split into two: External Marginalized and Internal Marginalized. Understanding why adolescents had two marginalized identity statuses in this study compared to adults in the original validation study needs more explanation. Because of the differences in participants’ ages in the two studies, this may imply that adolescents may have more issues with marginalization compared to their older counterparts. Regarding the Externally Marginalized identity status, much has been written about marginalization that multiracial individuals may experience. As previously mentioned, externally enacted marginalization can come from a variety of sources, such as policies (Townsend, Markus, & Bergsieker, 2009) or family (Nadal et al., 2013) via a variety of mechanisms (Nadal et al., 2011; Townsend, Markus, & Bergsieker, 2009; Tran, Miyake, Martinez-Morales, & Csizmadia, 2016). This marginalization can be further amplified by phenotype, appearance, and racism (Crane, 2013; Jackson, Yoo, Guevarra, & Harrington, 2012). These may also be related to the Internally Marginalized status, in that these factors may trigger internalized stigma about one’s racial backgrounds or identity threat. For example, researchers examined how being part of a majority group (i.e., White) is related to issues of racism and privilege associated with stigma consciousness and identity threat for multiracial people. Based on their findings, the researchers posit that biracial Whites with higher levels of stigma consciousness may have negative interactions with minority groups because of the racism those minority groups experience, leading biracial people to feel their White identity is under threat (Wilton, Sanchez, & Garcia, 2013). Charmaraman and Grossman (2010) found in their study of multiracial adolescents that many were disengaged from their identities, which may be related to racial ambiguity. How these factors affect adolescents living in Hawai‘i, a minority-majority state with its own set of historical and social circumstances that differ from the continental U.S. is worthy of further exploration.

Limitations

This study is not without limitations. First, the original M-HAPA Scale was developed using state-of-the-art criteria of the day to develop the four-factor structure, which included retaining factor loadings of .3, cross-loaded items, and varimax solution rotation. This study did not use a comparable method for coming to the five-factor solution with regards to rotation and cross-loading. A confirmatory study following the exact techniques used in the original M-HAPA Scale validation study is warranted. Regarding the scale itself, 40% of the items were dropped, reduced from an original 43 to 26 items. It is possible that many of the items may not have been appropriate for this age range or may have not been salient to these youth at this point. Questions may not have been racially salient as well. For example, Chong and Kuo (2015) changed many of the questions to examine how biracial Asians identify. Their four-factor structure included minority affiliated status and majority affiliated status. This might be something to further consider in a Hawai‘i-context, as Native Hawaiian identity is contested both internally
and externally in terms of blood quantum and cultural practice (Kuanui, 2008). Furthermore, location-based identity in Hawai‘i, such as “local” transcend race, while White or haole identities are also contested and stratified based on historical and social influences into groupings like Caucasian and Portuguese (Geschwender, Carroll-Seguin, & Brill, 1988; Reed, 2001; Rohrer, 2010).

Other reasons for why this sample did not confirm a four-factor identity structure may lie with the sample’s characteristics. In the original validation study, participants ranged in age from 17 to 58 while in this study participants were adolescents; therefore, the expectation that adolescents would endorse a similar identity status structure as adults may have been unrealistic. Others only found mediocre support for four identity statuses when using the M-HAPA Scale with a sample of continental U.S. multiracial adults (Damann, 2007). Conversely, the five-factor structure endorsed by this Hawai‘i-based adolescent sample may not be applicable to adults. Because the scale was developed among a sample of adults, the salience of questions related to this sample’s experiences may not be the same. More testing on how the measures are perceived by youth and adolescents are called for. One item, Internally Marginalized, only had three items, and it could be that only this sample might endorse separated Marginalized statuses. More testing of the scale with adolescents should be considered. Another limitation to this study was the number of students who did not answer any M-HAPA items. This may be due to a number of factors. For example, some students may be multiracial, but consider themselves racially or ethnically of one group (e.g., Native Hawaiian-White only considering themselves Native Hawaiian). This may mean that a higher number of students would fall into a singular identity status. Students may have also considered themselves other labels (e.g., “local”) which may imply a more transcendent racial status based on the generation born in Hawai‘i. More research is needed to understand how adolescents label themselves beyond just racial or ethnic categories.

Furthermore, the experiences of adolescents may have contributed to an extra identity status. The literature suggested that both monoracial and multiracial adolescents go through periods of identity exploration, although this may be less so for multiracial adolescents (Charmaraman & Grossman, 2010; Fisher, Reynolds, Hsu, Barnes, & Tyler, 2014). Education experiences of students from the time the data were collected (2001-2004) may affect how multiracial students previously saw themselves. For example, the present study over-sampled Native Hawaiian adolescents. Native Hawaiian representation in textbooks was often negative (Kaomea, 2000). Curriculum changes in the state over the last 20 years have included more Native Hawaiian cultural practices, such as ‘āina-based learning (Chinn, 2011; Kaneshiro et al., 2005). These experiences may have profound effects on adolescent identity for youth attending these schools. Students who attend public schools may be more apt to experience cultural diversity and integration of culture through popular events like May Day celebrations, which serve to highlight many different cultural groups residing in the state (Steele, 2013). These events or pedagogical methods may have been front-and-center in this sample’s lives at the time of data collection and may have had a bearing on the different identity statuses uncovered here. Social changes since the collection
of this data indicate that the M-HAPA Scale should be further used to explore the ethnic identity statuses of multiracial people, including adolescents.

Another limitation has to do with the construction of the racial categories using the OMB standards. In Hawai‘i, ethnicity is often more salient than race. However, given the volume of ethnic groups, it would be difficult to develop multiple categories for multiethnic classification as study participants were allowed to select from 16 different racial/ethnic categories. Additionally, this study examined the sample as a whole only looking specifically at multiracial adolescents. Lastly, many public health funds and mental health block grants are disbursed using racial categorization following the OMB guidelines used by the U.S. Census, thus using racial categorization may be useful for program planners applying for grants.

Future Research

First, additional psychometric testing of the M-HAPA Scale among this sample is warranted. For instance, this study did not examine gender differences in identity status. In addition, this study combined all multiracial groups. Given the different experiences of racial and ethnic groups outlined in the introduction, additional psychometric researcher regarding differences by multiracial group (e.g., biracial vs. three racial groups) or by ancestry group (e.g., any white ancestry) would be important to examine to see if the five-factor structure is consistent across these groups. This study also only used data from high school students; additional research with younger students and longitudinally should be considered. Researchers should endeavor to test the M-HAPA Scale with multiracial people across the life course and in different geographic locations and cultural settings to examine the differences in identity status between adults and youth.

Public Health Implications

The findings from this study point to several implications for public health and public health educators, specifically around the salience of culturally tailored interventions. Those who tailor or target public health programs to particular racial or ethnic groups (see Kreuter, Lukwago, Bucholtz, Clark, & Sanders-Thompson, 2003) should make special considerations regarding multiracial people who fall within a target group. Specifically, multiracial people may have many different identities statuses, such as those found in this study. These identities may differ from racial or ethnic categorizations found on official forms are reported in public health data (Kaneshiro, Geling, Gellert, & Millar, 2011; Office of Management and Budget, 1997). Programs tailored using methods such as community-based participatory research, which include community members as intervention informants as they define themselves as a community (Israel et al., 2008), could potentially exclude multiracial individuals who feel marginalized from the intervention target community, either internally or externally (i.e., a health intervention for a particular racial or ethnic group). As “community” is often defined in racial/ethnic terms (Walter & Hyde, 2012) and public health data are also reported in the terms, intervention designers should exercise more care and deliberate inclusion of multiracial people into the development of interventions.
Conclusion

In conclusion, this study identified five different possible identity statuses among a sample of Hawai‘i-based multiracial youth, using the M-HAPA Scale. These statuses were identified through rigorous and extensive exploratory factor analyses and tested using confirmatory factor analysis. Goodness-of-fit statistics indicated a good factor structure in both EFA and CFA with five identity statuses. Additionally, other psychometric analyses (e.g., internal consistency/reliability, convergent and divergent validities) were performed that added support for this underlying factor structure. Researchers should consider using both the full and reduced M-HAPA Scales in studies of multiracial identity.
CHAPTER 3. EXAMINING THE RELATIONSHIP BETWEEN IDENTITY STATUS, SELF-ESTEEM, AND DEPRESSION AMONG A SAMPLE OF HAWAIʻI ADOLESCENTS

Abstract

Introduction: A large proportion (41.5%) of Hawaiʻi’s youth under 18 are multiracial, and nearly one-third of the state’s youth in middle school and high school reported experiencing depression. Ecological theories of identity development posit that identity changes over time and is situational. Ethnic/racial identity status have been shown to be related to both self-esteem and depression among adolescents. Thus far, no studies have examined the relationship between identity status, self-esteem and depression among multiracial youth residing in Hawaiʻi. Methods: Data from the University of Hawaiʻi at Mānoa John A. Burns School of Medicine’s Department of Psychiatry Pacific Peoples’ Mental Health Research Support Program were analyzed in this study. A total of 873 multiracial adolescents were included in the sample. Measures included latent identity status based on Multiracial Heritage Awareness and Personal Affiliation (M-HAPA) Scale (26 items) five identity status scores, self-esteem, and depression. Covariates were age, gender, ancestral background, family socioeconomic status based on household’s main earner’s education level. Models examining the mediating relationship between identity and self-esteem on depression were tested using structural equation modeling. Results: Model 1 (self-esteem mediating between identity and depression) fit indices (RMSEA = .036, CFI = .957, TLI = .932, and SRMR = .033) and Model 2 (identity mediating between self-esteem and depression) fit indices (RMSEA = .032, CFI = .963, TLI = .944, and SRMR = .030) show good fit. Variance in depression captured in both models was approximately 31%. Direct and indirect effects of the mediation were both \(p < 0.001\), suggesting identity and self-esteem mediate one another. In both models, self-esteem and identity were positively related to each other, and negatively related to depression. Only White ancestry was related to identity. Discussion: This study confirms findings in the literature related to self-esteem and depression. Two identity statuses were positively related to self-esteem and negatively related to depression, while three other identity statuses were negatively related to self-esteem and positively related to depression. More studies using the M-HAPA Scale are recommended. Public health implications include modification to counseling strategies for multiracial youth and adolescents who may be struggling with identity issues, and interventions for parents, educators, and school administrators to understand identity formation for multiracial people.

Introduction

At a state-level, data from the Hawaiʻi Youth Behavioral Risk Survey (YRBS) show that between 2013 and 2017, 27.6% of middle school students reported being ever being depressed (Hawaiʻi Department of Health, 2018). In the same period, 29.6% of high school students reported being depressed in the previous 12 months (Hawaiʻi Department of Health, 2018). Depression is related to many negative behaviors (e.g., substance use) and suicide (Mental Health America, n. d.). Hawaiʻi is also a state with the most multiracial people in the nation as a proportion of the total state population (Krogstad, 2015). The American Community Survey estimates that 41.5% of all youth under the age of 18
are multiracial in the state (U.S. Census Bureau, 2017). Several studies on multiracial people and mental health show mixed results for positive or negative outcomes. For example, studies that aggregate multiracial adolescents into a single racial category find higher rates of depression (Fisher, Reynolds, Hsu, Barnes, & Tyler, 2014; Radina & Cooney, 2000; Wong, Sugimoto-Matsuda, Chang, & Hishinuma, 2012) and higher risk for suicidal behaviors (Wong et al., 2012). Studies disaggregating groups by mixed heritages find Native American-Whites having higher levels of mental health disparities (Campbell & Eggerling-Boeck, 2006) or depression (Schlabach, 2013). Still other studies find some multiracial groups having better mental health outcomes. For example, Zhang (2011) found multiracial Asians had better mental health than their monoracial Asian counterparts in Hawai‘i.

Identity status is related to mental health. For example, multiracial people identifying solely with either a lower-status (e.g., black or Latino) or higher-status (e.g., white or Asian) group exhibited negative affect versus those who identified with multiple identities (Binning, Unzueta, Huo, & Molina, 2009). An integrated biracial identity, where individuals identify exclusively as biracial, has been associated with higher self-esteem and lower depression (Lusk, Taylor, Nanney, & Austin, 2010). In another study, Asian-Whites that were biculturally or Asian identified had less depression (Suzuki-Crumly & Hyers, 2004). Identity denial or denying multiracial people the opportunity to identify as multiracial, was related to lower self-esteem among multiracial college students (Townsend, Markus, & Bergsieker, 2009). Malleable identity, or changing identities based on context, predicted depression in another study, except for Asian-Whites (Sanchez, Shih, & Garcia, 2009).

In addition to ethnic identity, depression and self-esteem are related across the lifespan. Self-esteem was found to increase from adolescence through midlife (Wagner, Lüdtke, Jonkmann, & Trautwein, 2013), then reaches a peak around age 60 where it starts to decline (Orth et al., 2010, 2012). Race was found to alter the trajectory of self-esteem, where the decline in self-esteem was steeper for those who were Black compared to whites (Erol & Orth, 2011; Orth et al., 2010). Additionally, those with higher education had higher starting self-esteem compared to those with low-level education, though the trajectories of self-esteem over the lifespan were similar for both groups (Orth et al., 2010). Low or decreased self-esteem in adolescence was tied to higher levels of depression in adulthood (Orth et al., 2012; Steiger et al., 2014), and depression also has been found to decrease through midlife, and then grow as adults age (Davey et al., 2004; Kessler et al., 1992, Mirowsky & Reynolds, 2000, Orth et al., 2012), similar to that of self-esteem, but in the inverse.

Phinney (1992) developed the Multigroup Ethnic Identity Measure (MEIM) to assess common components of ethnic identity. The measure was developed and tested with both monoracial and multiracial high school students and used in studies to assess ethnic identity of both mono- and multiracial people. The MEIM was developed to account for social identity theory and developmental theory, and to describe the strength of ethnic identity through attachment, pride, and feelings toward one’s ethnic group. The measure also examines identity development through exploration of and commitment to an ethnic identity; and, participation in ethnic customs and traditions (Roberts et al., 1999).
A number of studies have examined the relationship between ethnic identity as measured by the MEIM and self-esteem. Roberts et al. (1999) found highly significant positive correlations between scores on the MEIM and self-esteem among monoracial groups. The MEIM was also used in studies examining multiracial people and self-esteem. Again, higher ethnic identity as measured by MEIM was associated with higher self-esteem (Lusk, Taylor, Nanney, & Austin, 2010; Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017). Roberts et al. (1999) also examined the relationship between the MEIM and depression among monoracials, finding a negative correlation, though the strength and significance of the association varied by ethnic group.

Another measure of identity status was developed by Choi-Misailidis, the M-HAPA scale, and was empirically tested in 2003, with data drawn from a sample of multiracial adults in Hawai‘i enrolled at three universities in the state. The scale was found to have four identity statuses: Singular Status identifying with only one racial group; Marginal Status, where one does not identify with any of their racial groups; Integrated-Combinatory, where one integrates all of their racial groups; and, Integrated-Universality, where individuals identify with a number of racial groups (Choi-Misailidis, 2009). The M-HAPA scale has also been used to examine the relationship between ethnic identity status and self-esteem. Choi-Misailidis (2003) first correlated the four identity subscales—Singular, Marginal, Integrated-Combinatory, and Integrated-Universal—with self-esteem. Singular and Marginal Identity Statuses were significantly negatively correlated with self-esteem, while both Integrated Statues were significantly positively correlated with self-esteem. Damann (2007) used the M-HAPA scale with multiracial adults residing in the U.S., testing both self-esteem and depression. Marginal Identity status was related to low self-esteem and depression, while Integrated-Combinatory status was related to higher self-esteem and lower depression. Singular identity status was not related to any mental health outcomes, while Integrated-Universality status was only correlated positively with self-esteem (Damann, 2007). Chong (2012) used a modified version of the M-HAPA Scale with Asian-White adults living in the U.S. and Canada, which accounted for affiliation with either a participant’s dominant or minority racial group. None of the identity statuses predicted self-esteem (Chong, 2012; Chong & Kuo, 2015).

Phinney (1989) hypothesized that ethnic identity changes over time as adolescents grow older, moving through a number of phases. She confirmed this generally by performing an exploratory longitudinal study using her ethnic identity theory, though two outlying participants had regressed to earlier identity stages (Phinney & Chivara, 1992). Choi-Misailidis (2003) also mentions two theories of biracial theories of identity development (Kich and Poston) that follow a linear path, similar to Phinney (1989).

Given the large population of multiracial youth in Hawai‘i and given that nearly a third of middle school and high school students report being depressed in the last 12 months, understanding how identity may affect self-esteem and depression becomes more important. Researchers report that negative stereotypes about a number of different ethnic groups proliferate in state schools which can also affect ethnic identity (Mayeda, Chesney-Lind, & Koo, 2001). One law review posits “local” humor that depends
Methods

Theoretical Model

The theoretical model for this study follows is that of Williams and Mohammed’s (2013a) racism in health framework. The framework posits that health outcomes (physical and mental) are caused by a number of factors, including psychological responses (e.g., self-esteem and racial identity) to upstream factors, such as family socioeconomic status, race, and gender. For purposes of this study, the racism and health framework was used as the basis for the structural equation model. See Figure 1.2 on Page 19 for more details.

Study Design and Sample

This study used data collected by the University of Hawai‘i at Mānoa John A. Burns School of Medicine’s Department of Psychiatry (DOP) as part of its Pacific Peoples’ Mental Health Research Support Program (PPMHRSP). During the research program, DOP conducted presentations about the PPMHRSP project at 12 intermediate and high school sites across the state that were selected to participate. A random sample of students in the 8th and 12th grades was drawn from enrollment lists to increase the generalizability of study findings. Participants were recruited over a three-year period from September 2001 through May 2004 during the school year. Assent procedures were used to gauge student interest in participating in the study, and parents of interested students were provided consent forms to complete the recruitment process. As part of the research project, participants completed the Hawai‘i Adolescent Behavioral Survey (HABS), which contained the M-HAPA and a number of other psychological batteries and inventories (e.g., Rosenberg Self-Esteem Inventory). Throughout the project period, a total of 1,172 completed the HABS. Time 1 of the HABS was administered to students in the 8th and 12th grades. Students were compensated for their participation in the HABS (between $5 and $10). This study used data from only Time 1. As this study concerned multiracial identity, only multiracial respondents were retained for this study, resulting in a total analytic sample of 873.

Measures

Demographic measures. Demographic variables included age (coded continuously) and gender (1 = male; 2 = female). Socioeconomic status was measured by asking for the household’s primary income earner’s educational level (8th grade or less, some high school, high school graduate or passed the General Education Development test, some college/community college, college graduate, master’s degree, or doctoral degree). Composite ethnicity variables for study participants was built using parents’ ethnicity. Ethnic and racial choices were Hawaiian, Japanese, Filipino, Korean, Samoan, Black, Puerto Rican, Chinese, Caucasian, Portuguese, Hispanic, Tongan, American Indian/Alaska Native, Other Asian,
other Pacific Islander, or “don’t know.” For this study, final composite ancestry variables were created to address limitations in the number of racial categories the data analysis program could process. The ancestry variables followed the Office of Management and Budget (OMB) Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity (OMB, 1997) to reflect the respondent’s racial ancestry. These ancestry variables were White ancestry (Caucasian and Portuguese), Asian ancestry (Chinese, Filipino, Japanese, Korean, and Other Asian), Native Hawaiian/other Pacific Islander ancestry (Hawaiian, Samoan, Tongan, and Other Pacific Islander), Latino ancestry (Hispanic and Puerto Rican), and other ancestry, which included Black, American Indian/Alaska Native and “don’t know”.

**M-HAPA Scale (Choi-Misailidis, 2003).** The M-HAPA Scale (Choi-Misailidis, 2003) consists of 43 items. All items are scored on a 7-point Likert scale (1 = “Strongly Disagree,” 4 = “Unsure,” and 7 = “Strongly Agree”). An exploratory factor analysis found support for a four-factor solution. Mean scores were used in the study; however, no information was given about missing scores. The first factor, Marginalized Status, a 13-item subscale, had good reliability (α = .83), and contained statements, such as “I feel disconnected from all racial groups.” The second factor, Singular Status, was comprised of a 13-item subscale. This scale had statements, such as “I wish to be identified solely as a member of one of my parents’ races,” and also had good reliability (α = .85). The Integrated Identity Status—Combinatory Factor subscale had good reliability (α = .83), and was comprised of 10-items, such as “I participate in the cultural practices of all groups in my racial heritage.” The last factor and subscale, Integrated Identity Status—Universality was made up of 9 items demonstrating an affinity for many groups, such as “I feel connected to many racial groups.” The overall reliability was not as strong as the individual factors (α = .71) (Choi-Misailidis, 2009).

The psychometric properties of this scale among the same sample of adolescents were examined in Chapter 2, which found support for a five-factor solution. The first factor was Integrated Status (6 items, α = .6939). A representative item from this subscale is, “I have things in common with people of all races.” The second factor was Singular Status (7 items, α = 0.8022), which represented identification with one group and had items like, “I feel more loyalty to my mother’s heritage.” Appreciation Status (4 items, α = 0.7913), the third factor, included four items, such as, “Being of mixed race, I appreciate both my mother’s and father’s heritages.” The original Marginal Status subscale was found to have two subscales in this sample. First, Externally Marginalized (6 items, α = 0.7731) had items, such as, “Other people do not accept me because I am racially different,” while the last factor, Internally Marginalized (3 items, α = 0.6031) had items like, “I feel disconnected from all racial groups.” The questions for each subscale and their respective standardized factor loadings are located in Table 2.3 (Chapter 2, p. 32).

**Rosenberg Self-Esteem Scale (Rosenberg, 1965).** The Rosenberg Self-Esteem Scale (RSES) is a commonly used 10-item scale using a 4-point Likert scoring (1 = “Strongly Agree,” 4 = “Strongly Disagree”). Items include statements, such as, “I feel like I do not have much to be proud of” and “I take a positive attitude toward myself.” The scale has been used in various studies with multiracial people with high internal consistency (Allen, Garroitt, Reyes, & Hsieh, 2013; Bracey, Bámaca, & Umaña-Taylor, 2004;
Herman, 2004). Studies that have used this specific scale that may overlap with the populations of interest in this study included one of the biracial Polynesian-Whites (α = .86; Allen, Garriott, Reyes, & Hsieh, 2013), a study comparing Asian-Whites (α = .92) and Black-Whites (α = .86; Suzuki-Crumly & Hyers, 2004), and multiple multiracial groups (α ranged from .58 to .87; Bracey et al., 2004). Standardized mean score were used, computed using the “alpha” command in Stata 15.1, which imputes missing scores (StataCorp, 2013). In this study, the RSES had a Cronbach’s alpha of .8424.

Center for Epidemiologic Study-Depression (Radloff, 1977). The Center for Epidemiologic Study-Depression (CES-D) shortened scale is commonly used to assess for depression symptoms, and consists of 10 items asking respondents to quantify how often they felt depressive symptoms during the previous week: rarely or none of the time (0-1 day), some or a little of the time (1-2 days), a moderate amount of time (3-4 days) or most or all of the time (5-7 days). Statements include, “I had crying spells” or “I felt depressed” and reversed scored items like, “I enjoyed life” or “I felt happy.” Items that were reverse scored were correct so that a higher score meant higher levels of depression. These are split into two factors, negative affect, and positive affect, which are then summed and averaged. The CES-D has been used in various applications and with multiple groups in Hawaii (see Antonio et al., 2016; McCubbin & Antonio, 2012; Mossakowski & Wongkaren, 2016). The psychometric properties of this version of the CES-D has been demonstrated previously among adolescents in Hawaii and was shown to have similar factor structures for Native Hawaiian and non-Hawaiian adolescents, with Native Hawaiian youth having slightly higher levels of depressive symptoms than non-Hawaiian students (McArdle, Johnson, Hishinuma, Miyamoto, & Andrade, 2001). In this study, standardized mean score were used, computed using the “alpha” command in Stata 15.1, which imputes missing scores (StataCorp, 2013). In this study, the CES-D had an alpha of .8013.

Data Analysis Plan

Initial descriptive analysis, factor analyses, Cronbach’s alphas for scales, and a correlation matrix were presented in Chapter 2. The present analysis used structural equation modeling to assess the relationship among a latent identity variable, self-esteem, and depression. The independent variables were latent identity status, as measured by the M-HAPA Scale, and self-esteem, as measured by the RSES. The dependent variable was depression, as measured by the CES-D. Models to examine the mediating effect of each of the independent variables on depression were constructed. An initial measurement model was constructed using all variables of interest, and non-statistically significant (p ≥ .05) variables were dropped until only significant variables were retained. The final structural model used modification indices provided by Mplus to improve model fit. Descriptive statistics were reported, and a correlation matrix was produced to examine the underlying relationship among the variables. Covariates included participants’ age, gender, key household earner’s education level (as a proxy for family socioeconomic status), and racial ancestry.

Data were prepared using Stata 15.0 (StataCorp, College Station, TX); structural equation modeling (SEM) was performed using MPlus 7.4 (Muthen & Muthen, Los Angeles, CA). Because some
respondents did not complete all items, robust maximum likelihood (MLR) was used to estimate the models. Goodness-of-fit statistics used to assess model fit were the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Standardized Root Mean Square Residual (SRMR). Cut-offs for acceptable model fit followed those recommended by Schreiber, Stage, King, Nora, and Barlow (2006) of RMSEA < .06, CFI ≥ .95, TLI ≥ .95, and SRMR ≤ .08, although others suggest more flexible cut-offs (Niemand & Mai, 2018) and texts on structural equation modeling suggest alternative cut-offs (Schumaker & Lomax, 2015).

Ethics Statement

This study uses secondary data from the Hawai‘i Adolescent Behavioral Survey. All included participants previously provided assent; parents of participants also provided consent under a previous University of Hawai‘i at Mānoa Institutional Review Board (#10350). This study qualified under the previously filed application.

Results

Sample demographics are included in Table 3.1. Exact racial background of study participants is provided to contextualize the different multiracial respondents, but these categories were not used in the study due to limitations in the software’s capacity to handle the high number of categorizations. Therefore, ancestry groups were used as a predictor, as discussed above. The largest ancestry group was Asian (87.06%), followed by both Native Hawaiian/other Pacific Islander and white (79.84% each). Over a quarter of respondents (26.67%) were of Latin ancestry, and just over one-fifth of respondents (20.85%) were from other ancestral groups (e.g., Black, American Indian/Alaska Native). A majority of the respondents’ main household income earner’s highest education was high school or equivalent (28.48%), followed by some college (24.13%), and college graduate (9.24%). Mean age of participants was 15.09 (SD = 2.04), and the majority were female (59.22%).

Mean standardized scores of the M-HAPA subscale items, RSES, and CES-D were created and are presented in Table 3.2. A correlation matrix of the continuous variables is provided in Table 3.3. Higher age was significantly correlated with Integrated Status, while lower age was significantly correlated with Singular and both Marginalized Statuses. Main income earner education level was significantly negatively correlated with Singular Status and depression, and positively correlated with self-esteem. Among the M-HAPA subscales, integrated status was significantly positively correlated with Appreciation status and significantly negatively correlated with singular and the two marginalized statuses. The singular and marginalized statuses were significantly positively correlated with each other. Self-esteem was positively correlated with integrated and appreciation statuses, and negatively correlated with the three other status types and depression, while depression was positively related to singular status and the two marginalized statuses, but more so with externally marginalized.

Two initial models were tested based on the racism in health framework. Model 1 examined the mediating relationship of self-esteem on identity and depression, while Model 2 examined the mediating relationship of identity on self-esteem and depression, testing for direct and indirect effects. These initial
Table 3.1: Sample Demographic Information for Structural Equation Modeling

<table>
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<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>%</th>
<th>SD</th>
</tr>
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</tr>
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<tr>
<td>Asian ancestry</td>
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<td>Native Hawaiian/Pacific Islander ancestry</td>
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<tr>
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<td>2.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>43</td>
<td>5.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School or Equivalent</td>
<td>237</td>
<td>28.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some College/Community College</td>
<td>224</td>
<td>26.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Graduate</td>
<td>201</td>
<td>24.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>77</td>
<td>9.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD or Equivalent</td>
<td>33</td>
<td>3.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Participant Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>356</td>
<td>40.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>517</td>
<td>59.22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)NHOPI = Native Hawaiian/other Pacific Islander

\(^b\)Respondents were of two or more races; thus, ancestry variable percentages do not sum to 100%.
models had poor fit. In both cases, variables in the model were iteratively removed if the model results for each the variable coefficient in question was \( p \geq .05 \). Across both models, only White ancestry was significantly related to identity. The remaining ancestry variables were not significant and dropped.

**Model 1 Results**

In the first model with self-esteem mediating between identity and depression, age was only significantly related to both depression and identity. Proxy socioeconomic status was significantly positively related to self-esteem and negatively related to depression. Female gender was positively related to identity, negatively related to self-esteem, and positively related to depression. Initial model goodness-of-fit statistics were RMSEA = .062, CFI = .865, TLI = .799, and SRMR = .046. Model fit was improved by using the modification indices covarying the residuals of the integrated subscale mean with those of the appreciation and marginal statuses. The revised fit goodness-of-fit statistics were RMSEA = .036, CFI = .957, TLI = .932, and SRMR = .033, with three meeting the cut-offs for a good fitting model. The model with standardized coefficients is presented in Figure 3.1. Total direct and indirect effects of self-esteem mediating the relationship between identity and depression were both highly statistically significant (\( p < .001 \)), suggesting that self-esteem partially moderates the effect of identity on depression. White ancestry was positively related to identity, while identity was positively related to self-esteem and negatively related to depression. Self-esteem was negatively related to depression. Caution is warranted in further interpreting the latent identity variable as it combines together five different identity constructs,

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**Table 3.2: Means, Standard Deviations, Skewness and Kurtosis for Standardized Scale Composites**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated</td>
<td>0.0002</td>
<td>0.6281</td>
<td>-0.4223</td>
<td>3.2553</td>
</tr>
<tr>
<td>Singular</td>
<td>0.0009</td>
<td>0.6792</td>
<td>-0.1168</td>
<td>2.6716</td>
</tr>
<tr>
<td>Appreciation</td>
<td>-0.0006</td>
<td>0.7838</td>
<td>-1.6909</td>
<td>7.0290</td>
</tr>
<tr>
<td>Externally Marginalized</td>
<td>0.0024</td>
<td>0.6864</td>
<td>1.0739</td>
<td>3.8946</td>
</tr>
<tr>
<td>Internally Marginalized</td>
<td>0.0016</td>
<td>0.7475</td>
<td>0.8135</td>
<td>3.7698</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.0002</td>
<td>0.6439</td>
<td>-0.5709</td>
<td>4.2219</td>
</tr>
<tr>
<td>Depression</td>
<td>0.0001</td>
<td>0.5998</td>
<td>1.3466</td>
<td>4.9771</td>
</tr>
</tbody>
</table>

---

**Table 3.3: Correlation Matrix of Variables (Pairwise)**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent Education (2)</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated (3)</td>
<td>.14***</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singular (4)</td>
<td>-.19***</td>
<td>-.09*</td>
<td>-.14***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciation (5)</td>
<td>.02</td>
<td>.01</td>
<td>.45***</td>
<td>-.19***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Externally Marginalized (6)</td>
<td>-.17***</td>
<td>-.02</td>
<td>-.21***</td>
<td>.37***</td>
<td>-.28***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internally Marginalized (7)</td>
<td>-.20***</td>
<td>.02</td>
<td>-.30***</td>
<td>.38***</td>
<td>-.34***</td>
<td>.53***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem (8)</td>
<td>.05</td>
<td>.10*</td>
<td>.22***</td>
<td>-.15**</td>
<td>.21***</td>
<td>-.33***</td>
<td>-.23***</td>
<td></td>
</tr>
<tr>
<td>Depression (9)</td>
<td>.01</td>
<td>-.12***</td>
<td>-.16***</td>
<td>.17***</td>
<td>-.23***</td>
<td>.32***</td>
<td>.20***</td>
<td>-.49***</td>
</tr>
</tbody>
</table>

*\( p < .05 \); **\( p < .01 \); ***\( p < .001 \)
two of which were positively associated with self-esteem negatively associated with depression, while the remainder were negatively associated with self-esteem and positively associated with depression.

**Model 2 Results**

The second model had identity mediate between self-esteem and depression. Age was only significantly positively related to identity and depression. Female gender was positively significantly related to depression and identity, and negatively related to self-esteem. The socioeconomic proxy variable that accounted for the main income earner’s education level was significantly positively related to only self-esteem. The measurement model goodness-of-fit statistics were RMSEA = .061, CFI = .864, TLI = .804, and SRMR = .045, which was improved to RMSEA = .032, CFI = .963, TLI = .944, and SRMR = .030 after covarying the error of the same residuals as in Model 1. However, this model had a slightly better fit, although TLI was slightly under the .95 cut-off. The final model with the standardized SEM results is presented in Figure 3.2. Similar to Model 1, the total direct and indirect effects indicated identity had a mediating effect between self-esteem and depression (p < .001). The coefficients were similar to

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**Figure 3.1:** Model 1 Path Diagram with Standardized Structural Equation Model Results
those found in Model 1. Again, the same caution is warranted in interpreting identity variable paths as in Model 1.

**Model Comparison**

Based on goodness-of-fit statistics, Model 2 better represents the sample data well. Model 1 captured 30.7% of the variance in depression, while Model 2 captured slightly more of the variance in depression (31.0%). Model fits were very similar. While Model 1 had slightly lower goodness-of-fit statistics compared to Model 2, it captured much more of the variance in self-esteem (20.7% vs. 2.6%, respectively). On the other hand, Model 2 also captured much more variance in identity (29.7%) vs. Model 1 (10.5%). When examining the mediating relationship of self-esteem and identity on each other and depression, it would stand to reason that both mediate on one another.

**Discussion**

The purpose of this study was to assess the relationship between identity status, self-esteem, and depression among a sample of Hawai‘i-based adolescents using structural equation modeling. This study documented two main findings. First, self-esteem and identity were both negatively related to depression in this study. Second, self-esteem and identity mediated one another, which may mean that
these two variables are uniquely related to one another. In addition, this study demonstrated the utility of the M-HAPA scale in assessing multiracial identities among adolescents. Regarding other variables included in the model, this study found that parental education, as a proxy for socioeconomic status, had a positive effect on self-esteem in both models, and negative relationship with depression in the first model. Female gender was negatively related to self-esteem and positively related to identity and depression in both models. White ancestry was the only variable of all the ancestry variables created that was significantly related. Older age was positively related to both depression and identity in both models.

The latent identity variable used in this study combined five different identity constructs, making it difficult to directly interpret in the two models presented above. Two of these identity constructs—Integrated and Appreciation Statutes—were positively correlated with self-esteem and negatively related to depression. The remaining three statuses, Singular Status and both Marginalized Statuses (Externally and Internally Marginalized) were negatively associated with self-esteem and positively associated with depression. In looking at these correlations, this reflects some of the prevailing literature on identity, self-esteem, and depression. Among studies examining adults, one found Asian-Whites who were more biculturally had higher self-esteem and reported lower levels of depression, but this same study also found Asian-affiliated individuals also had higher self-esteem and lower levels of depression (Suzuki-Crumly & Hyers, 2004). Contrarily this study found single group affiliation, or “Singular Status” was negatively related to self-esteem and positively related to depression. This study did not examine which of groups respondents affiliated or identified with, and this would be an area for further exploration. A different study using the Rockquemore and Brunsma (2002) derived identity statuses and examining mental health among Black/white biracial individuals found those with a more integrated multiracial identity had higher self-esteem and lower depression (Lusk, Taylor, Nanney, & Austin, 2010). Multiracial identity denial (“pick one racial group” as opposed to checking all groups that apply) in one experiment was related to lower self-esteem among multiracial college students (Townsend, Markus, & Bergsieker, 2009). In focusing in on multiracial adolescents, more studies have examined substance use rather than internalized disorders like self-esteem or depression. For example, higher achieved ethnic identity as measured by the MEIM was related to lower levels of drug use among multiracial youth and adolescents (Zapolski, Fisher, Banks, Hensel, & Barnes-Najor, 2016). A different study found higher achieved ethnic identity was also protective for multiracial adolescents; however, ethnic identity achievement decreased as the sample got older, which the authors posit may be related to identity development for multiracial people occurring in a non-linear fashion (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017).

In regard to the second finding, this study also finds for the strong relationship between ethnic identity and self-esteem. One study examining biracial adolescents found that biracial adolescents’ ethnic identity as measured by the MEIM was significantly and positively correlated with self-esteem, but the correlation was stronger among other minority groups and weaker among whites (Bracey, Bámaca, & Umaña-Taylor, 2004). One study found a strong indirect and mediating effect of self-esteem on identity and adolescent drug use (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017). In the literature on the
monoracial minority population, the relationship between self-esteem and ethnic identity is well
documented (Phinney & Chavira, 1992; Xu, Farver, & Pauker, 2015).

Regarding the covariates in this study, older age was related to higher depression and higher
identity. Depression was found to increase as children age into early adulthood, and the intercepts were
different by race and gender, and trajectories differed by race, gender, and socioeconomic status (Adkins,
Wang, Dupre, van den Oord, & Elder, 2009). Linear theories of identity posit higher ethnic identity
achievement as people age (Phinney, 1989). In this study, age was positively and significantly correlated
to Integrated Status, and negatively and significantly correlated with the Singular and both Marginalized
Statuses, which gives credence to the thought that identity becomes more solidified as individuals age.
However, because this study was cross-sectional, there was no way to examine how the sample’s
identities may have changed over time or to test whether participants moved toward an Integrated Status.
It is worth recalling that Phinney and Chivara (1992) found some participants moved backward along their
linear model. Gender differences in depression, notably higher levels of depression among female
adolescents have been noted as well in the literature (Adkins et al., 2009), and may account for the
gender differences found in this study. Others have found as well that males have higher self-esteem in
adolescence than females, though both have an upward trajectory as each group ages (Wagner, Lüdtke,
Jonkmann, & Trautwein, 2013). Gender differences in identity development are less explored. Because
there was a strong relationship between female gender and latent identity, stratified analyses by gender
are warranted.

Parental education was a proxy variable for socioeconomic status, which was negatively related
to depression in just one model in this study, a finding supported in the literature (Adkins, Wang, Dupre,
van den Oord, & Elder, 2009). Others have found a relationship between living in higher income areas
and mental health treatment seeking for adolescents (Cummings, 2014). Likewise, higher socioeconomic
status is related to higher levels of self-esteem among adolescents (Bannink, Pearce, & Hope, 2016),
which is supported by the findings in this study. Bannink and colleagues (2016) found perceptions of
class difference (i.e., believing your own family was poorer than others) was related to lower self-esteem.
In Hawaii, class differences are also tied to ethnicity (Okamura, 2008) which may have effects on self-
esteem and ethnic identity. More research is needed on the intersections between socioeconomic status,
self-esteem, and ethnic identity development for multiracial people to better understand how these
relationships interact with one another.

Curiously, in this study, only White ancestry was the only variable positively associated with self-
esteem. No other ancestry groups were significant in the original model. One paper where researchers
examined the ethnic identity of Asians and Whites in Hawaii found that Asians born in Hawaii had lower
levels of ethnic identity compared to their continental US counterparts, while Whites from Hawaii and the
U.S. continent had comparable levels of ethnic identity. In the same study, researchers found that
continental Whites who relocated to the state had lower levels of self-esteem after living in Hawaii for a
year, which they theorized was related to moving to a majority-minority state (Xu, Farver, & Pauker,
Higher ethnic identity among White adolescents was also found to be related to increased risk of drug use (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017). While others did not explore the possibility (Xu, Farver, & Pauker, 2015), the lower level of self-esteem may partly be due to the discrimination that White residents in Hawai‘i have anecdotally reported (Rohrer, 2010) as a result of historic and social upheaval in Hawai‘i. More research should be done to understand if whiteness among adolescents in the state is related to discrimination, stereotype threat, and lower self-esteem.

**Limitations**

There were several limitations to this study. First, the use of a latent identity construct limits interpretation of identity status in the structural equation models; however, we some information could be gleaned through examining the correlation matrices to understand the relationships between the different identity statuses and key mental health variables. Although this impacts interpretability, the models presented do show strong relationships among identity status, self-esteem, and depression. Because the data were cross-sectional, we can only describe the relationship between identity status, self-esteem, and depression, and not examine how these changed over time for this cohort. Another limitation was this study also used the racism and health framework (Williams & Mohammed, 2013) as the underlying theory for model construction. Because this framework puts self-esteem and racial identity in the same level and mental health (i.e., depression) as an outcome, this study did not examine whether depression could have lowered self-esteem or depression. While this study did not examine racism, it has similar constructs as Williams and Mohammed’s model, and points to other paths in further understanding how distal factors can be associated with or affect racial identity. Third, this study did not test for factor invariance across ancestry groups, as each of these models may be different for each of these groups. Ethnic or racial groups may experience living in Hawai‘i differentially as demonstrated in other research (Xu, Farver, & Pauker, 2015). Lastly, interactions were not tested in this study (i.e., multiple group effects).

**Future Research**

First, future studies should examine the level of affiliation or group belonging of adolescents, how that may affect their identity, and what role socioeconomic status, gender, or age play in both multiracial adolescent ethnic affiliation and identity status. For example, one study of biracial Polynesian/White adults found higher levels of Polynesian identification among females than males (Allen, Garrett, Reyes, & Hsieh, 2013). Association with either a socially higher- or lower-status groups (e.g., White vs. Black) may also affect multiracial youth’s mental health. One study asking multiracial adolescents to determine which group they identified with found that those who identified with both low- and high-status groups had better outcomes on psychological tests compared to those identifying solely with either a low- or high-status group (Binning, Unzueta, Huo, & Molina, 2009). In Hawai‘i, this would require further nuance to determine which groups would be defined as “high status” (e.g., White, Japanese) versus “low status” (e.g., Pacific Islanders). Furthermore, negative stereotypes exist about several groups in the state, including Native Hawaiians, other Pacific Islanders, and Filipinos, especially among adolescents (Mayeda, Chesney-Lind, & Koo, 2001), which may affect adolescent group identification, ethnic identity
status, and mental health. More research is needed to further understand these relationships in a Hawaiʻi-context.

Additionally, further research is needed to test the M-HAPA scale in different contexts across life spans and geographies. Given the ecological nature of the underlying M-HAPA theory, the M-HAPA Scale lends itself to use in longitudinal analyses. Research projects to examine how identity status changes over time, how events related to identity status change, and how changing identity status is related to mental health are sorely needed. For youth and adolescents, using an instrument such as the M-HAPA would help to identify key times for intervention if using the scale longitudinally. Lastly, additional constructs measuring key distal factors related to mental and physical health drawing on the racism and the health model (e.g., socioeconomic status, employment, grade point average) would be useful in further understanding the events leading to changes in identity status.

Public Health Implications

Possible intervention research is sorely needed as well. Given the high rate of adolescent depression in the state and the relationship between depression, self-esteem, and identity status found in this study, public health practitioners, mental health counselors, and educators should consider a number of things. First, individualized assessment of multiracial adolescent identities should be performed before including individuals who may have either an Externally or Internally Marginalized Status in culturally grounded interventions. For those students who may currently identify with a Singular Status, recognition of that individual’s contemporary identity status should be supported as identity denial was related to self-esteem, and identity challenges may further marginalize multiracial students. Similarly, for adolescents who may identify as Integrated or are in Appreciation, programmers should allow further cultural exploration or practice for these youth. In this way, adolescents who are in different identity statuses can be supported “where they are” in their identity exploration.

Given that this study supports prevailing literature on the relationship between identity, self-esteem, and depression, educators and mental health practitioners should be better educated on the relationship between mental health and identity formation among multiracial people. This could include developing cultural competency modules on multiracial ethnic identity development. Cultural humility approaches should also be used: as multiracial people’s identities change over time according to ecological models, health practitioners and educators should also adopt a lifelong learner model and employ critical self-reflection to examine the ways in which their actions may contribute to multiracial identity development (Tervalon & Murray-García, 1998). One community-level intervention could be social marketing campaigns to build awareness of multiracial people. Lastly, institutions can help reduce identity challenges for multiracial people by simply using a “check all that apply” racial/ethnic categorization scheme on official forms.

Conclusion

Ethnic identity status has a strong relationship with self-esteem, and both are related to mental health outcomes. The prevailing literature demonstrates the mental health disparities among multiracial
groups in the aggregate, and specific multiracial groups when disaggregated. More must be done to support the ethnic identity development and self-esteem of multiracial adolescents to mitigate poor mental health outcomes. Further research is needed to understand the proximal and distal factors that affect ethnic identity status to develop upstream interventions to support the expanding multiracial population.
CHAPTER 4. KEY EVENTS OVER THE LIFE COURSE LEADING TO CURRENT ETHNIC IDENTITY AMONG MULTIRACIAL ADULTS

Abstract

Introduction: Hawai‘i has the highest proportion of multiracial people in the U.S. made up of a combination of Asians, Native Hawaiian/other Pacific Islanders (NHOPI), and Whites. Multiracial identity development, or how multiracial people arrive at a racial/ethnic identity has been studied extensively in continental U.S. contexts, and has been related to mental health. Theories related to multiracial identity development also take two approaches: linear with higher “achieved” identity, or ecological, where a variety of events, contexts, or interactions can influence identity over time. Many of these studies have used quantitative approaches to examine the relationship between mental health and multiracial identity and/or lacked representation from multiracial NHOPIs. The purpose of this study was to qualitatively examine events related to multiracial identity development and mental health over time among a sample of Hawai‘i-based adults using a timeline method. Methods: Ten participants were selected by multiracial background (e.g., Asian-NHOPI) and by generational status (e.g., Millennial). Using a timeline, participants indicated key events related to their identity. Three to four highly rated events were selected for in-depth discussion using a semi-structured interview guide to ask about the event and mental health. Participants were also asked to reflect back on their timeline and mental health over the life course. Transcripts were analyzed using inductive qualitative analysis, which was deductively categorized using an existing framework. Results: Six key themes related to multiracial identity were extracted from interview transcripts, including geographic location; family, peers, and mentors; schools; and, activism and professional life, were all key toward participants’ development of a racial/ethnic identity. Some participants strongly related their identity struggle and resolution more strongly to mental health, while others felt the relationship was weaker. Discussion: While the findings from this study generally reflect the findings of other studies conducted on the U.S. continent, there are some notable new findings. First, events discussed provide support for the racism in health framework and support the idea that identity is contextual and experience-driven. Second, the life course perspective provides a number of key touchpoints for potential public health interventions, which are further outlined in an implications section.

Introduction

The multiracial population, or people who are of two or more races, is growing in the U.S. (Colby & Ortman, 2015) and also make up a nearly one-quarter of the Hawaii’s population (Krogstad, 2015). Within the state, the largest multiracial groups are Asian-Whites (18% of all multiracial people), Asian-Native Hawaiian/Pacific Islander (18% of multiracial people), Native Hawaiian/Pacific Islander-White (12% of multiracial people), and Asian-Native Hawaiian/Pacific Islander-White (22% of all multiracial people) (Krogstad, 2015). The large number of multiracial people in Hawai‘i is related to a complex history of colonization and its results (Hall, 2008; Ocampo, 2014; Trask, 1992), including decimation of the Native Hawaiian population through disease (Stannard, 2008), and increased immigration from Asia and the continental U.S. through industry, such as sugar and whaling (Kana‘iaupuni & Liebler, 2005). Some
believe the state’s multicultural landscape leads to a “stew pot” model of racial assimilation in Hawai‘i results in racial and ethnic harmony (McDermott & Andrade, 2011). Others dispute this model. For example, the multicultural harmony narrative minimizes the history of struggle and resistance of Native Hawaiians (Okamura, 1998) and diminishes the underlying racial power dynamics created through importation of Chinese, Japanese, Portuguese, and other ethnic laborers during the plantation period (Edles, 2004). Other contemporary issues faced by Native Hawaiians challenge the harmonious stew pot model as well, such as land loss due to militarization (Kajihiro, 2008) and the Thirty Meter Telescope project atop Maunakea (Loomis & Cho, 2015). Native Hawaiian serving institutions, such as Kamehameha Schools or the Office of Hawaiian Affairs, face legal challenges and accusations of “racism” against non-Native Hawaiians due to their policies favoring Native Hawaiians (Lindsey, 2009; Okamura, 2008). Although Hawai‘i has the largest population proportion of multiracial people of all states, the Hawai‘i Department of Health uses blood quantum—re-reifying of the “one-drop rule”—in official state department of health data reports, which assigns anyone with Native Hawaiian ancestry to a “Native Hawaiian” category, although only 4% of Native Hawaiians living in Hawai‘i in the mid-1980s were considered “full” Native Hawaiians (Kaneshiro, Geling, Gellert, & Millar, 2011). Blood quantum is also used to identify Native Hawaiians eligible for Hawaiian Home Land parcels (Kauanui, 2008).

People who are multiracial may not necessarily identify with the racial category they are assigned for a variety of reasons. Studies have examined various experiences that can reinforce or deny the racial or ethnic identity of multiracial people. Demographic forms that ask for one, single racial group (“forced-choice”) were a commonly mentioned theme in one study which found those who were forced to choose one race group had lower performance self-esteem and motivation compared to those who could select as many racial groups as needed (Townsend et al., 2009). Other salient touchpoints for multiracial identity include questioning by others (i.e., “What are you?”) due to skin color (Khanna, 2004) or racial ambiguity (Jackson, 2012; Tran, Miyake, Marinez-Morales, & Csizmadia, 2016), outsider status within one’s community (Jackson, 2012), microaggressions within families (Nadal et al., 2011, 2013), identity validations by others (Lou & Lalonde, 2015; Lou et al., 2011; Remedios & Chasteen, 2013), experiences of invalidation or microaggressions from family members (Nadal et al., 2011, 2013; Sue, Bucceri, Lin, Nadal, & Torino, 2007), cultural exposure (Khanna, 2004), and chronic awareness of stereotyping and prejudice (Wilton et al., 2013).

Ecological Ethnic Identity Theories and Ethnic Identity Status

Several theories exist for how monoracial and multiracial people form an ethnic or racial identity. Rockquemore, Brunsmma, and Delgado (2009) examined some of the prevailing literature on identify formation and classified the approaches four ways: problem, equivalent, variant, and ecological. The problem approach problematizes multiracial identity through the prism of segregation (Park and Stonequist as cited in Rockquemore et al., 2009) using a linear developmental approach, starting with an introduction to both parents’ races and marginalization, a crisis of cultural conflict, and resolving with adjustment (Stonequist as cited in Rockquemore et al., 2009). The equivalent approach followed
Erikson’s model of ego formation, where multiracial people identities followed a similar trajectory as
Blacks, wherein multiracials went through several linear stages resulting in a commitment to an identity
(Erikson cited in Rockquemore et al., 2009). The variant finds biracial and multiracial people work to
construct an integrated identity (Root as cited in Rockquemore et al., 2009). Poston’s model of biracial
identity as an example of the variant approach (Poston 1990). Three of the approaches outlined by
Rockquemore and colleagues (2009) are more linear in nature (problem, equivalent, and variant).
Another notable linear theory of ethnic identity development is by Phinney (1989), but this model was
based on monoracial ethnic identity development, though it has been used by others to examine
multiracial identity (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017; Lusk, Taylor, Nanney, & Austin,
2010; Roberts et al. 1999).

The last approach discussed by Rockquemore, Brunsma, and Delgado (2009) is ecological
where multiracial identity is context specific and may not have discernable linear stages. Notable
ecological theories of identity were developed by Root (1998), Rockquemore & Brunsma (2002) and
Choi-Misailidis (2003). Rockquemore & Brunsma’s (2002) multidimensional model of biracial identity was
based on a study of Black-White biracials. They identified four different identity statuses: a singular
identity (exclusively one race or another), a border identity (a unique category using both races), a
protean identity (changing between Black, White, or biracial depending on situation), and transcendent, or
“human” identity based on no definable characteristics. This original multidimensional model has been
further refined with the addition of identity dimensions contributing to ethnic identity for Black-Whites
include social, political, cultural, physical, and formal identities, leading to the development of a complex
identity matrix (Brunsma, Delgado, & Rockquemore, 2013). Choi-Misailidis (2003) developed the
Multiracial-Heritage Awareness and Personal Affiliation (M-HAPA) theory. It shares some characteristics
of Rockquemore & Brunsma (2002). The M-HAPA theory also helps to solve some of the issues with
prevailing linear models of ethnic identity formation. M-HAPA allows for assertion of identity depending on
the situation. The theory posits that individuals hold both an internal mixed-race identity, comprised of an
internal personal awareness of one’s ancestry, and an external identification with one’s racial or ethnic
groups. Examples of personal awareness include feelings, sense of belonging, or attitudes towards one’s
groups. External identification includes racial reporting on forms or participation in cultural events. The
theory hypothesizes the closer these two components are to one another, the better the mental health
outcomes. Choi-Misailidis found three identity statuses during empirical testing of the theory: Marginal
Identity Status, Singular Identity Status, and Integrated Identity Status, split into two subfactors:
combinatory and universality (Choi-Misailidis, 2009; p. 303).

Multiracial Mental Health

Many studies examining multiracial people’s mental health generally provide both positive and
negative results. Multiracial youth were found to have more depressive symptoms (Fisher, Reynolds, Hsu,
Barnes, & Tyler, 2014; Radina & Cooney, 2000). Biracial youth were found to have higher self-esteem
than Asian youth, but less than other youth of color (Bracey, Bámaca, & Umaña-Taylor, 2004). Other
multiracial youth, specifically Native American-White youth had higher levels of mental health disparities (Campbell & Eggerling-Boeck, 2006) and when compared to their monoracial Native American and white counterparts, higher levels of depression (Schlabach, 2013).

In studies that examine multiracial identity and mental health, multiracial people identifying with their lower- or higher-status grouping tended to exhibit negative affect and higher stress levels than multiracial people who identify with their multiple identities (Binning, Unzueta, Huo, & Molina, 2009). Biracial people with an identity that integrates both their racial identities had higher self-esteem and lower depression versus those who did not acknowledge their biracial identities (Lusk, Taylor, Nanney, & Austin, 2010). A study comparing a small sample (n=66) of Asian-Whites and Black-Whites college students found no differences between the groups or a relationship between multiracial identity and depression, however, post-hoc tests revealed Asian-Whites that were biculturally or minority identified had less depression (Suzuki-Crumly & Hyers, 2004). Identity denial was related to lower self-esteem and lower motivation in an experiment with multiracial college students (Townsend, Markus, & Bergsieker, 2009). Changing identities depending on the social context, or malleable identity, predicted depression in a structural equation model, but this was not the case for Asian-Whites (Sanchez, Shih, & Garcia, 2009).

Among younger groups, biracial adolescents who had a stronger sense of ethnic identity had higher levels of self-esteem (Bracey, Bámaca, & Umaña-Taylor, 2004). Another study using Marginal Man as its theoretical framework found self-identified multiracial people had poorer mental health outcomes than their monoracial counterparts, and this was found consistently across all multiracial groups except American Indian-Blacks (Cheng & Lively, 2009). Among monoracial groups, ethnic identity has been found to be a moderator for discrimination and health outcomes for Asian Americans, but in some cases increased the effects of discrimination or depression (Gee et al., 2009). Asians who had higher levels of ethnic identity had worse mental health outcomes when faced with discrimination (Yip, Gee, & Takeuchi, 2008). A study of Asian university students found that ethnic identity moderates the relationship between discrimination and somatic symptoms (Chen et al., 2014).

**Mental Health Over the Life Course**

Mental health outcomes also change across the lifespan. Recent longitudinal studies point to self-esteem increases from adolescence into young adulthood (Wagner, Lüdtke, Jonkmann, & Trautwein, 2013; Erol & Orth, 2011), peaking in adulthood (Erol & Orth, 2011), and then tapering off into old age (Orth, Robins, & Widaman, 2012; Orth, Trzesniewski, & Robins, 2010) like an upside down “U”. Self-esteem also has differential trajectories across racial groups: Hispanics had lower self-esteem to start with compared to Whites and Blacks; self-esteem for Blacks and Hispanics eventually grew in young adulthood surpassing Whites (Erol & Orth, 2011). Race and socioeconomic position compound the steepness in the decline in self-esteem for Black adults, while higher educational levels can keep self-esteem levels elevated (Orth, Trzesniewski, & Robins, 2010). Ecologically speaking, a number of factors can negatively influence self-esteem over time. Home environment, including paternal presence, poverty, and mother depression early in childhood were predictive of self-esteem later in life, but the effect
diminishes over time as individuals grow older (Orth, 2017). Depression trajectories over the life course differ from that of self-esteem. Studies show depressive symptom are higher in early adulthood, then decrease in middle age, and increase again after age 50 (Kessler, Foster, Webster, & House, 1992), an effect found in other studies (Mirowsky & Reynolds, 2000, Orth et al., 2012). A number of factors can contribute to depression over the lifespan, one of which is birth cohort and generational differences in depression symptoms (Lewinsohn, Rohde, Seeley, & Fischer, 1993). In looking specifically at self-esteem’s relationship to depression over the lifespan, a number of studies point to a negative relationship between the two. Two studies found evidence that lower or decreasing self-esteem in early adolescence was tied to higher levels of depression twenty years later (Orth et al., 2012; Steiger, Allemand, Robins, & Fend, 2014).

The Present Study

How these social and ecological factors may inform multiracial people’s identity development in Hawai‘i is unexplored. Phinney (2000) called for more studies using narratives to examine and provide insight into the contextual reasons for identity development. The present study sought to examine the contexts and events that may have led to an individual’s identity choices over time, and how those may have related to mental health by asking “What were key events in a multiracial person’s life related to their ethnic identity, and how did that relate to mental health?” This qualitative study used one-on-one narrative interviews with a life course perspective aided by a participant-developed “lifeline” to gain insight on how key events influenced both multiracial participants’ identity development and mental health, drawing on existing identity development theory (Rockquemore & Brunsma, 2002; Choi-Misailidis, 2003) and the racism in health framework (Williams & Mohammed, 2013a). The two identity frameworks were selected as they have been used in studies examining multiracial identity, and Choi-Misailidis’s M-HAPA Theory was empirically examined in this dissertation. Williams and Mohammed’s racism and health framework was selected as it employs a life course perspective.

Racism and Health Model

As discussed previously, a number of ecological factors can also influence the ways multiracial people identify themselves or are externally identified by others. These include “forced choice” dilemmas (Townsend et al., 2009), identity challenges related to skin color (Khanna, 2004) or racial ambiguity (Jackson, 2012; Tran, Miyake, Marinez-Morales, & Csizmadia, 2016), family members (Nadal et al., 2011, 2013; Sue et al., 2007), identity validations by others (Lou & Lalonde, 2015; Lou et al., 2011; Remedios & Chasteen, 2013), cultural exposure (Khanna, 2004), and chronic awareness of stereotyping and prejudice (Wilton et al., 2013), among others. The complex interplay between ecological influences on ethnic identity and mental health are reflected Williams and Mohammed’s (2013a) racism and health framework (Figure 1.1, Chapter 1, p. 17). The framework provides a causal pathway connecting distal factors which can affect identity and mental health.
Methods

Study Design

This qualitative study used a one-on-one narrative interview structure aided by a “lifeline,” which is further described below. Interviews lasted approximately 54 to 125 minutes.

Lifeline method. The lifeline method merges visual life histories that include participant interpretation of key life events leading to “turning points,” or transitions in a participant’s life (Gramling & Carr, 2004), with “life stories” (Guo et al., 2016). Lifelines have been used in a variety of research contexts, including nursing research (Gramling & Carr, 2004; Howatson-Jones, 2011), same-sex relationships (de Vries et al., 2016), and transgender identity development (Mellman, 2016). In nursing research, Gramling & Carr (2004) used the methodology to explore the personal psychosocial development of younger adult women. De Vries et al. (2016) employed the technique to examine the shared lived experiences of same-sex couples (de Vries et al., 2016). Lastly, examining ethnic identity development mirrors the work of Mellman and colleagues, who used this method to examine transgender and gender variant identity development across different age groups, races/ethnicities, and gender identities (Mellman, 2016). The flexibility of this technique lends itself to exploring ethnic identity development and experiences, both negative (e.g., racism and discrimination) and positive (e.g., participation in cultural activities), contributing to an individual’s self-concept of ethnic identity.

Narrative interview and lifeline construction. The narrative interview used a semi-structured interview guide based on existing interview guides that also used a lifeline method (de Vries et al., 2016; Mellman, 2016). After participants provided written consent to participate, they were asked for some information about their current racial or ethnic identity labels, and then instructed on how to construct their lifeline by putting their birth date on the left side of the line and then the date of the interview on the right-hand side of the line. Participants were then asked to mark on the line any events, experiences, and/or periods of time that have influenced their current ethnic identity, and include the day, dates, or year than an event took place. Participants were invited to add more events to the line if they recalled an event later in the interview. Once participants finished creating their line, they were asked to rate each of the events on a scale of 0 to 4 in order of importance to their ethnic or racial identity. The events rated most important closest to birth, the midpoint of the line, and the present date were selected for further discussion. Depending on the interview length and participant willingness, participants were invited to discuss a fourth event of their choosing. To build the narrative, semi-structured interview questions asked about a description of the event, and then for any challenges, resources, rewards, and lasting impact of the event on the participant’s daily life and on the participant’s ethnic or racial identity. Clarifying probes were used for unclear statements.

After the narrative interview, participants were asked to reflect on whether their status as a multiracial person ever affected their aspirations or goals from the past. Following the transition question, participants divided their timeline by the ethnic or racial labels they used and to discuss how their identity has evolved over time. Following that, participants were asked to reflect on identities over time and how
they were related to their mental health. In the final step of the interview, the participant divided their timeline into “chapters” or “stages,” and name each stage listed on the timeline. These questions were intended to assist participants in summarizing the trajectory of their ethnic identity development at a higher level and further reflect on their identity over time. To close the interview, participants were asked to reflect on their overall experience as a multiracial person and reflect on what they would want others to understand about their life.

Sample

This study used a purposeful, non-probability, quota-based sample frame drawn from a snowball sample seeded by the investigator’s network. The sampling frame was based on two factors: generational status and multiracial identification based on the four largest multiracial categories—Asians, Native Hawaiians/other Pacific Islanders (NHOPI), and Whites—in the state (Krogstad, 2015) in order to maximize variance across mixed race experiences and across age groups while looking for themes related to the theoretical framework across the sample (Palinkas et al., 2015). Age stratification was based on generational status: ”Millennials” born between 1982 and 1999, “Generation X” born between 1965 and 1981, and “Boomers” born between 1946 and 1964 (Twenge, Sherman, & Wells, 2015). This was done to account for the unique history, racial, and ethnic relations in the state.

Participants were screened for age and racial group via Google Forms. All participants recruited were at least 18 years old. Additional demographic information about potential participants was collected (where the participant learned about the study, education and current income), and contact information. Participants were invited to participate on a first-come, first-serve basis as the sampling frame filled. A total of 28 individuals screened into the study, of which 11 qualified for inclusion, and 10 participated. Participants were excluded if they did not identify as multiracial or if someone matching their demographic profile were invited or had completed an interview. Interviews were conducted between November 2018 and January 2019. Table 4.1 provides participant demographics, using participant-reported multiracial identification. Four men and six women participated representing all generational groups and the largest multiracial groups in the state.

Potential participants were invited to interview at the University of Hawai‘i at Mānoa and a satellite university office. At the start of each interview, informed consent was provided to the participants, including information about possible discomfort in discussing sensitive matters and past experiences. As a thank you for their time, participants were given an external phone battery charging bank.

Data Analysis

Physical data (i.e., timelines, notes, and protocol forms) were kept in the principal investigator’s office, and electronic data were kept on a password protected computer. Interviews were transcribed verbatim via an electronic transcription service (Temi.com). Transcripts were cleaned and de-identified by the principal investigator. While participants reported their ethnicities, to further mask their identities, most ethnicities have been transformed to racial groups per the Office of Management and Budget Guidelines
for Reporting Race (Office of Management and Budget, 1997). Short narrative summaries were produced for each participant and are reported in the appendices. Photos of the lifelines were taken by the principal investigator to analyze and were collapsed into a single timeline to examine overlaps and commonalities in experiences by using the events that participants rated most highly (events rated as “4”) to assist with developing themes from the transcripts. Transcripts were first inductively coded in NVivo 12 (QSR International Psy, Ltd.) and compared to the participants collapsed timelines using the Williams & Mohammed’s (2013a) racism in health model as a guiding framework to inform the analyses.

**Ethics Statement**

The University of Hawai‘i at Mānoa Institutional Review Board approved this study (IRB # 2018-00345).

**Results**

What follows first is an examination of the types of events over the participants’ life course that affected their ethnic identity development using the highest rated events from their timelines. Following that is a presentation of cross cutting themes related to the racism in health framework. Short narratives from each participant provided in the Appendix.

**Thematic Analysis Across the Lifespan**

To examine commonalities in events that influence multiracial identification, an overlapping timeline was produced using the events that the participants rated highest (rated as 4). Nine participants rated at least 3 events as “4,” except for one participant, and Asian-NHOPI-White Boomer male, whose maximum rating was “3” on only indicated two events with that rating. Figure 4.1 shows the most highly rated events from each participant together. Themes (see Table 4.2) related to highly rated events across the lifespan were geographic origins and places, family, and school in earlier life (youth, adolescence, and young adulthood), and activism or working with activist organizations or the development of a professional identity in young adulthood through older adulthood. In addition, both positive and negative mental health, (which was not listed on the collapsed timelines as these were event specific) was another theme generated from transcripts.

**Geographic origins and places were related to both identity reinforcement and challenges over the life course.** One of the most common reoccurring themes through young adulthood were

<table>
<thead>
<tr>
<th>Gender</th>
<th>Multiracial Group</th>
<th>Generational Status</th>
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<tbody>
<tr>
<td>Male</td>
<td>Asian-White</td>
<td>Millennial</td>
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<tr>
<td>Male</td>
<td>Asian-White</td>
<td>Generation X</td>
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<tr>
<td>Female</td>
<td>Asian-White</td>
<td>Baby Boomer</td>
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<tr>
<td>Female</td>
<td>Native Hawaiian/other Pacific Islander-White</td>
<td>Millennial</td>
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<td>Generation X</td>
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<tr>
<td>Female</td>
<td>Asian-Native Hawaiian/other Pacific Islander</td>
<td>Millennial</td>
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<tr>
<td>Female</td>
<td>Asian-Native Hawaiian/other Pacific Islander-White</td>
<td>Baby Boomer</td>
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</tr>
<tr>
<td>Male</td>
<td>Asian-Native Hawaiian/other Pacific Islander-White</td>
<td>Baby Boomer</td>
</tr>
</tbody>
</table>
Figure 4.1: Compressed timelines from 10 participants, highest rated events only
geographic location, including origins and where people moved from or to (e.g., from the continental U.S. to Hawai‘i or from Hawai‘i to another country). These locations provided contrasting experiences for participants. For example, an Asian-NHOPI-White Millennial male described the importance of living in a Hawaiian Homestead in his youth: “We lived in a Hawaiian community, being Hawaiian was celebrated… we loved living there and it was, as I mentioned it made us appreciate cultural stuff more because we didn’t really get it that much from home.” Because the neighborhood and school were centered in Hawaiianess, this participant was able to experience cultural exposure. In contrast, a Baby Boomer Asian-NHOPI female discussed how growing up in Hawai‘i contrasted with other family members’ experiences:

We had cousins, we have cousins who lived live in California and other places and I guess their lifestyle is a little more, more ethnically limited because they were more ostracized as [Asian]. There, in, as opposed to here. So pretty much, you know, when you walk around Honolulu you see people that look like you and you don’t think anything of it. You don’t think I’m [Asian], and so are they, I mean, but apparently in the mainland they do.

Access to ancestral geographic origins was important for other participants to understand their backgrounds. For example, the NHOPI-White Millennial female discussed how going to her mother’s home country in the Pacific was important to having access to culture, reaffirming her identity. A different participant, an Asian-White Millennial male, relayed his experience in joining a club for Pacific Islander students in college, and how those from the Pacific and in particular Hawai‘i, came together because of their experiences on the U.S. continent to forge a collective identity:

It’s easier to remain divided and stick to your clique or your neighborhood or your tribe or your corner of the island when you’re at home on an island... [A]ll of a sudden now we have this shared uncomfortableness in this culturally foreign place, therefore the common ground of, oh, but we all have this sort of shared island experience now makes the common ground that much more uniting that much more relatable. Now it’s of more value, of more. It’s almost more therapeutic to talk about our shared, but different island memories or traditions and customs than it is to talk about how we were divided and how we didn’t get along when we were all back on an island. All of us are homesick, right? And all to some degree and all of us are longing for this sense of community or identity. This now becomes a safe haven to relate to. Now there were surrounded by a majority of white people.

Two other participants, the NHOPI-White Millennial female, and the Asian-White Baby Boomer female both discussed moving abroad, where a different identity, “American,” put upon them. The boomer described this experience this way: “I was never really patriotic before, but boy did I get I become patriotic in [the foreign country].”

Family, peers, and mentors were both positive and negative for identity development. Many participants discussed how family, peers, and mentors were positive for their identity development. Interaction with parents and visiting or living with extended family were seen positively for many participants. For example, an NHOPI-White Generation X female participant called extended family visits to her home on the mainland “interventions”: “My grandparents visiting, bringing Hawaiian food when they visit, bringing the latest music, calling us by our Hawaiian names. Those were like major interventions, you know, in my childhood for us to understand that we are Hawaiian.” Meeting family for the first time
<table>
<thead>
<tr>
<th>Theme 1: Geographic origins or locations reinforced or challenged identity</th>
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<tbody>
<tr>
<td><strong>Subthemes</strong></td>
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<tr>
<td>&quot;Place&quot; helping to reinforce identity</td>
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<td>&quot;Place&quot; presenting Identity challenges</td>
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<tr>
<th>Theme 2: Family, peers, and mentors were both positive and negative for identity development</th>
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<tbody>
<tr>
<td><strong>Positive experiences with parents, peers, and mentors</strong></td>
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<tr>
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<tr>
<td><strong>Negative experiences with parents and peers</strong></td>
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<th>Theme 3: Schools with curricula that included culture or self-exploration helped participants develop an identity, while schools could also reinforce negative stereotypes or be unsupportive</th>
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<tbody>
<tr>
<td><strong>Culture, history, and self-exploration were important curricula features</strong></td>
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<tr>
<td><strong>Erasure of Pacific/Native Hawaiian history and racism in schools negatively impacted identity</strong></td>
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Theme 4: Participating in activism or including a community aspect to professional work was another way to reinforce identity

<table>
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<tr>
<th>Activism helped interviewees reframe their relationships to their identities</th>
<th>“I got involved, and sort of by osmosis at first, but the need to want to create change and the fact that I was identifying as ‘I am a brown man, I am an Asian Pacific Islander.’” – Asian-White Generation X Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activism helped some interviewees reframe their relationship with Hawai‘i</td>
<td>“I just got involved in that and it was through that act, that activism and organizing and you know, the study that is inherent to that kind of work that the um, the relationship between the United States and us Hawaiians marked as an inferior less sovereign blood quantified racialized people became so much clearer.” – NHOPI-White Generation X Female</td>
</tr>
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</table>

Activism helped some interviewees reframe their relationship with Hawai‘i

“How do I use the safety nets and the privileges that I've been that I didn't ask for, but I was born into. And how do I redirect and funnel some of that towards Hawaiians or Hawaiian culture, whether it’s the preservation or the uplifting of how do I give back to that effort.” – Asian-White Millennial Male

Theme 5: For some participants, their identities and both positive and negative mental health were correlated while others saw less of a relationship

| Negative Mental Health | “I'd say half or a good chunk of insecurities or, or flirt with depression or anxiety have been around self-identity, have been around racial identity. Cultural identity. Yeah, for sure.” – Asian-White Millennial Male |
| Positive Mental Health | “I think my identity and my mental health have become stronger and better. I struggled with it a lot when I was younger, but I embrace it now… Maybe I didn't acknowledge [my identity before], not necessarily ashamed of it. It's gotten healthier and stronger I think with time… Both my identity and mental health” – Asian-NHOPI-White Generation X Female |

“[My mentor’s] become like another mother figure for me... It’s helped me to navigate professional spaces, personal spaces, intimate spaces, and it’s helped me become a more confident woman. And I think having confidence has a lot to do with good mental health.” – Asian-NHOPI Millennial Female

*NHOPI = Native Hawaiian/other Pacific Islander

was another way that participants discussed connections to their heritages. One Asian-NHOPI-White Generation X female said her first visit to her extended family in Asia was an important way in which she became connected to both her family and ethnic background:

I think for me that was just a significant thing because it was the first time my family, my [Asian] family met me, I met them even though I don't recall it at all. Um, and then it was the beginning of many trips to come and the relationship, the forming of my relationship with my [Asian] side or even knowing that I was [Asian].

However, parents could impart negative feelings towards participants’ sense of identity. Two participants specifically mentioned either experiencing or witnessing abuse. The Asian-White Generation X male participant recounted multiple instances of abuse at the hands of his father, and how that affected his relationship with his Asian heritage:

That's really big for me when I tell you that I always identified as haole first, you know, like, but I'm haole, but I'm white. You know, I would say that I'm [different White ethnic groups], right? I would say those things because of the shame I felt at the attachment that I was in a guilty by association. I was this bad person because I was [Asian] on my Dad's side right? You know, that I was brown and that side of me was dirty and bad.
An Asian-NHOPI Millennial female recounted how witnessing domestic violence in the home influenced her perceptions of Hawaiian culture: “Before 2013, my idea of being Hawaiian was a lot of violence because that’s what I saw from my Hawaiian family. And not just physical violence, verbal violence. Violence.”

Peers could be another source of identity challenge or validation. A few participants mentioned getting picked on or made fun of. Two participants discussed being taunted at school. One Asian-NHOPI-White Baby Boomer male discussed being made fun of because of his skin tone, but how those did not affect his achievement or participation at school: “I was the white boy, teased for being a skinny white boy. Past that initial shock, and even to this day, it’s kind of strange, despite the white boy thing, I was still the class president chosen for a lot of things.” The Asian-NHOPI-White Generation X female participant talked about how her peers did not understand her ethnic Asian background at a younger age:

I struggled with it when I was younger being a multiracial ethnicity because people didn’t really know what [Asian country] was, at least where I grew up at the time when I was younger. I think I was kind of odd that way, or my friends that didn’t understand it, they couldn’t, or what [Asian ethnic] food was or where [Asian country] was.

These struggles led this participant to have issues with fitting in with her peers at school who were from more monoethnic backgrounds or with Asians in general. On the other hand, peers could be a source of validation for identity. For example, the NHOPI-White Generation X female relayed this story that illustrates this point:

In middle school when one of my Hawaiian classmates asked me what is my nationality? And I told him I was Hawaiian. He goes, oh yeah, I can see it. And that was like, that totally blew my mind, but totally blew my mind, and I felt really affirmed, you know.

Another way some participants discussed identity formation and validation was via mentorship. Mentors were mentioned in young adulthood by two participants, and this coincided with college. The Asian-NHOPI female Millennial participant who associated violence with being Hawaiian discussed how finding her mentor provided her with a role model for holding her multiple racial identities:

To see somebody who just accepts both of her ethnicities and who is really grounded in one and becoming more grounded in the other, I feel like it’s okay to be who I am... it’s okay to have an [Asian] identity and be proud. And it’s okay to be Hawaiian and proud.

The NHOPI-White Millennial female participant discussed how having a mentor helped her to become more grounded in an indigenous identity after taking a course on indigenous politics. For this participant, this mentorship helped her to grow her interests in activism and professional activities, discussed more below.

Schools with curricula that emphasized history, culture, and exploration helped participants develop an identity, while schools could also reinforce negative stereotypes or be unsupportive. For the Asian-NHOPI-White Millennial male interviewee, cultural exposure during school, particularly elementary and high school, were important to his identity development: “that was probably
the most exposure to Hawaiian words, culture, values that I've ever had. Pretty much every field trip or something involved language, um, or working with the land." College was a particularly important time for three participants. As mentioned previously, the NHOPI-White female Millennial also felt her education around indigenous issues in college helped with her identity: "I never really identified as indigenous before that class. It took me a while to see that as an identity, a political identity for myself. Because of that class, that's when I started to have those thoughts around being indigenous." The NHOPI-White female Generation X interviewee discussed taking Hawaiian studies as important because they grew up on the continent, and another interviewee, the Asian-NHOPI-White Generation X female participant discussed a special year-long educational program that tapped into her Native Hawaiian identity which helped to change her career trajectory. While these participants felt this exposure to culture and history was valuable to their identity, one participant, an Asian-NHOPI-White Baby Boomer male felt his experiences being immersed in a Hawaiian-centered program did not prepare him for going to school on the continent.

Schools could also be places where interviewees faced erasure in the curriculum and racism. The NHOPI-White Millennial female participant discussed how Native Hawaiian and Pacific history was not discussed in the school curriculum when she was growing up, which resulted in skewed perceptions and internalized shame:

There's like almost zero representation school-wise of Pacific Islanders in terms of curriculum. And in terms of like population we're there, but it's pretty minimal in comparison to other identities. I think that attributed more to like the shame and like the uncomfortableness of not being like everyone else or even like the good races or whatever.

The Asian-White Generation X male participant discussed "Kill Haole Day," which coincides with the last day of the school year as a violent flashpoint where White students are beaten up. Another participant who was an Asian-White Baby Boomer female discussed how she experienced racism in her schools. In addition to facing racism from the teachers, she discussed how the schools enforced ethnic separation:

I think I surprised [my friend] when I said, "haven't you ever noticed all my friends were all hapa?" We were almost a forced into a group, you know, we weren't accepted by the Orientals, 'cause there were the Orientals, and some pure haoles were accepted into that. Okay. And then there were the locals and then the rest of us that were mixed and the hapa. We all just kinda ended up hanging out together and becoming friends because if we wanted friends, that's, you know, those were the ones that were.

This specific participant also reported issues with fitting in at school, including involvement in a large brawl on her high school campus. Colleges, too, could perpetuate stereotypes about Native Hawaiians. The Asian-NHOPI-White Millennial male interviewee discussed one of his first interactions on campus:

We first went, they had a lūʻau and we said let's go to that because that sounds like, oh, it's like a home away from home type of experience. But it was like, what a lūʻau is in movies, like not one food was Hawaiian except pineapple. They gave out plastic leis like what you get from like oriental trading. They did the um, really offensive, the hula that people in the mainland think what hula is, um, that was the first week of being there, so it was a bad first start.
Two participants specifically mentioned socioeconomic class issues pertaining to school, using “Punahou” specifically to communicate higher class education. The Asian-White Generation X male interviewee talked about how at the private high school he attended after getting kicked out of other campuses was “all white,” reemphasizing for him that whiteness was better.

**Participating in activism or including a community aspect to professional work was another way for interviewees to reevaluate, reframe, or reinforce their identities, or to give back to the local community.** Seven out of ten participants discussed some sort of work related to activism or community organizing. For example, the Asian-NHOPI-White Baby Boomer male interviewee worked to establish Native Hawaiian sovereignty. For a few participants, this work helped to shift how they related to their identities. For the Asian-White Generation X male talked about how joining a gay men of color organization on the continent helped him to both come out as gay, but to accept himself as multiracial:

It's huge because now I identify as [Asian] and I say I'm Asian Pacific Islander, first foremost because that's how the world sees me and that's how I see my myself. That's this culture I grew up in. I think being able to do that well, you know, that that helped me with coming out, that helped me with, um, identifying where I want to be in my life.

Through her work in an organization opposed to federal tribal recognition of Native Hawaiians, the NHOPI-White Generation X female discussed how this reframed how she viewed herself in terms of blood quantum, and how those have direct implications in politics and the Native Hawaiian sovereignty movement:

[Activism has] strengthened my analysis on sort of how the US maintains control over indigenous peoples and morphs it's, you know, shape shifts over time, but kind of so long as the same relationship is held in place, um, and it has complicated notions of race, um, and even indigeneity because it also stands upon sort of legal arguments as descendants of citizens of a state which was the Hawaiian Kingdom.

The Asian-NHOPI Millennial Female interviewee also learned through activism another way to be Hawaiian:

When I met [my mentor], I was like, holy [expletive], like there's this whole movement that's going on to bring people back to place, bring people back to this 'ike kupuna and the ways of our ancestors and knowledge of our ancestors. I just learned this today, that I'm a person that's learning to be Hawaiian through activism. Whereas she became an activist because of her identity as a Hawaiian.

Others discussed how their professional lives were a means for giving back to the community. The Asian-White Millennial male interviewee specifically discussed using his privilege as a means for advancing Native Hawaiian issues. The Asian-Native Hawaiian Baby Boomer female discussed working specifically to advance Native Hawaiians in the educational system in light of the historical trauma faced by the community:

I became a lot more conscious of [historical trauma] outside with the community doing community work and then of course when I worked with [education system]. That was really apparent, very apparent because those parents had basically taken their kids out of a system that was putting their kids down and trying to help them get better and the kids started attending school. You know, they because it was something that was meaningful to them. Not putting them down.
For some participants, their identities and mental health were correlated while others saw less of a relationship. Words that people used when describing negative thoughts, feelings or poor mental health were anger, anxious, confusion, depression, feeling different, fitting in, helpless, lonely, shame, struggle, trapped, and unhappy. For example, the Asian-White Generation X male who discussed some of his issues regarding his Asian identity said some of these negative feelings also revolved around the intersection between his sexual orientation and gender roles: “My dad’s side was all [Asian ethnicity]. And then you got to play football, you got to go clean the yard, you got all these other things, right? So I think that kind of [messed with my head].” Others related to fitting in and finding their place among their peers as stressful or anxiety producing. For example, while the NHOPI-White Millennial related how moving and other events would cause her identity to fluctuate, and with that, her mental health:

I think that identity has always been up and down for me like there are times where it's like totally fine and I don't question things, but then in some instances it's like a lot harder I think in, in new circumstances, new contexts that I have to um, confront identity again. Living in the continent, it made me confront my identity and who I was and why identified that way. Living in [the Pacific] made me do that too. So those times are really hard, when I have to ask myself a lot of questions about who I am and what I'm comfortable with and how I relate to people around me. But I think once I get to a place where I have those things answered, then it can be pretty comfortable.

Participants reported on positive mental health as well. For example, the Asian-NHOPI-White Generation X female participant related how both her mental health and sense of identity became both stronger and more positive over time. Others’ experiences also helped to counter some negative mental health they had experienced previously. For example, for the Asian-White Generation X male interviewee, joining a gay activist group let them to “being free.” The Asian-NHOPI Millennial female interviewee discussed how meeting her mentor allowed her to gain more confidence in herself, thereby having better mental health. The NHOPI-White Generation X female participant discussed how active resistance provides good mental health: “There’s a real productive side to resistance… and I think those are really good for my mental health.” While the Asian-NHOPI-White Millennial male participant mentioned how developing a sense of community while away at college helped with his mental health, he also felt balancing his professional work and life as a father was mostly the source of stress and mental health issues currently: “Just trying to figure out how to do everything is a little overwhelming.” Lastly, the Asian-NHOPI-White Baby Boomer male did not see so much of a relationship between his mental health and identity: “If at all? Small. And I can't be specific. It's kinda like when you're a kid and they call you haole boy, yeah it hurt, and it does. Did that affect me in my development and what I do? I got over it.”

Discussion

This qualitative paper examined the lives of ten multiracial individuals of Asian, Native Hawaiian, Pacific Islander, and White descent from three different generational groups. Using a “lifeline method,” participants talked about three or four events that were key to their identity development and whether those events had effects on their mental health. The two main findings from this paper were: (a) Hawai‘i-based multiracial individuals had a number of different experiences that influenced their racial and ethnic
identity that support existing literature and the health and racism framework; and (b) there were commonalities across the life course among nine participants that were highly salient to their identity development.

Participants discussed many different transmission pathways that align with the racism and health framework (Williams & Mohammed, 2013a). First, participants talked about the salience of their familial and ancestral homelands or being attached to Hawai‘i specifically, which has been well documented in the literature about Native Hawaiians (Andrade & Bell, 2011; Kana‘iaupuni & Lieber, 2005; McCubbin & Marsella, 2009). In the same vein, one respondent discussed at length how his ancestry was related to settler colonialism and resulting socioeconomic challenges faced by the Native Hawaiian community. Stannard (2008) has previously linked colonialism several different outcomes including poor health and incarceration. One respondent pointedly about the political and legal institutions that contributed to their identity and activism, including blood quantum, which complicates the issue of how Native Hawaiians racially as opposed to a sovereign indigenous entity (Okamura, 2008), which also complicated the work of another interviewee on developing constitution for self-determination. While no respondent specifically mentioned cultural racism, institutional racism through erasure of Pacific Islander history in the educational curriculum and racist practices of teachers were mentioned in the interviews, similar to the findings of other about stereotyping committed by educators in the state (Mayeda, Chesney-Lind, & Koo, 2001). Benham and Heck (1998) discussed at length how Hawai‘i’s school system developed through the 1990s and discussed how the local system was geared toward elite education, such as using standard English, and punctuated by a lack of Hawaiian language, history or cultural studies in schools.

Socioeconomic status was discussed by two respondents individually from positive and negative perspectives. Socioeconomic status is related to a multiple health conditions, including poor mental health outcomes for children (Reiss, 2013). Additionally, higher levels of socioeconomic status are related to more help seeking among youth with depression (Cummings, 2014). In a Hawai‘i context, poor socioeconomic status is related to lower mental health scores and depression (Pobutsky, Baker, & Reyes-Salvail, 2015). Though not explicitly reported above, some respondents in this study indicated that gender may have affected their life changes more than multiracial identity, though some female respondents mentioned their multiracial identity may have affected their identity development. In particular, two respondents discussed gender roles in their identity development in reflecting on their younger selves. Research suggests that for children, gender is more important than racial identity (Rogers & Meltzoff, 2017). In relating gender, racism, and mental health in adults, African-American women were found to have higher levels of poor mental health outcomes compared to the male counterparts when encountering racism, suggesting a moderating effect of gender (Greer, Laseter, & Asiamah, 2009). A number of respondents discussed their race choices from a “forced-choice” perspective or when encountering forms. This has been widely discussed in the multiracial identity literature (Townsend et al., 2009).
Negative cultural transmission, stereotypes about the different ethnic groups in the state and stigma surrounding whiteness, were discussed. Negative stereotypes regarding the Filipino community in Hawai‘i are documented (Cunanan, Guerrero, & Minamoto, 2006; Mayeda, Chesney-Lind, & Koo, 2001), as well as youth’s stereotypes related to educational underachievement among Samoans and Native Hawaiians (Mayeda, Chesney-Lind, & Koo, 2001), and violence among Samoans (Helm & Baker, 2011). Stress, especially as a result of historical trauma and discrimination, is a pathway to poor mental health. Stannard (2008) and Kaholokula, Nacapoy, and Dang (2009) have extensively discussed how the historical trauma experienced by Native Hawaiians affected the population through both a historic massive loss of life and contemporary health and social outcomes.

Interestingly, discrimination in terms of whiteness was discussed by three of the participants in this study. For example, one participant discussed “Kill Haole Day” while others discussed their fair skin as a marker for otherness. Rohrer (2010) discussed that while haoles may be subject to harassment, there is a clear distinction between individual cases and institutional oppression, as those who may face the harassment may have benefitted from the current construction of racial and ethnic relations in the state. Lastly, socioeconomic opportunities in Hawai‘i and differences between different ethnic groups was discussed at length by Okamura (2008), where he made the point that educational opportunity and employment are bound together. How whiteness and discrimination in a Hawai‘i context impacts identity needs more exploration.

Behavioral responses to these distal and upstream mental health factors have been mainly discussed in the mental health literature. For example, Williams and Mohammed termed “everyday resistance” in the racism and health model to include unhealthy behaviors, such as substance use. Higher levels of substance use relative to monoracial groups have been documented among multiracial people nationally (Sakai, Wang, & Price, 2010; Subica & Wu, 2018). Psychological responses regarding ethnic identity were discussed in the introduction, but a number of participants discussed the idea that phenotype, in this case being White, affected how they were perceived by others similar to other studies (Jackson, 2012; Khanna, 2004). Identity challenges by others experienced by one participant were also found in the literature (Lou & Lalonde, 2015; Lou et al., 2011; Remedios & Chasteen, 2013). Collective and individual resistance through activism and community work was found to be an important way to positively affect both ethnic identity and mental health in this study, which is reflected in other research (Khanna, 2004). Lastly, mental health was discussed by respondents, some of whom explicitly mentioned improved over time as their identities became more cohesive. This finding was also supported by the prevailing literature (Lusk, Taylor, Nannen, & Austin, 2010).

Regarding the second finding, distinct patterns emerged across participants’ lifelines that provide commonalities in their experiences across the life course. In this study, participants’ early lives were informed by parental relationships, educational opportunities, and cultural exposure. As participants aged, a number participated in activism which further helped them to create an ethnic and racial identity. Two participants mentioned that working at a school designed specifically for Native Hawaiians further
solidified their identities. And as participants got older, the more professional identities came to the forefront. Some of these events are comparable to other life course studies examining biracial identity development among adolescents, including geographic location, phenotype, and family (Csizmadia, Brunsma, & Cooney, 2012).

**Limitations**

This study did have several limitations. One was time spent with the participants. Not all events could be discussed in the time allotted with each participant. One way this limitation was minimized was by allowing participants to relate how events may have overlapped or were related to each other. Another limitation was the use of a timeline restricted to just events that were important to the identity development of the participants rather than two timelines with both mental health and ethnic/racial identity development. Another limitation was the sample itself. Nearly half of the people who signed up were not qualified to participate due to generational or racial composition requirements already met. This points to more people wanting to share their stories about their experiences as a multiracial person. To paraphrase, one participant jumped at the chance to participate as they felt multiracial issues were ignored. Additionally, it may be prudent in future studies to use general life course periods (e.g., adolescence) to guide the narrative portion of timeline interviews, though this would undoubtedly add to interview length, which may be harder for some participants. Lastly, this study faced a number of biases. First, recall bias and social desirability bias on the part of the participants and on the part of the interviewees was an issue. By using a guided lifeline method, participants were able to list events as they remembered them but were also given the opportunity to add more events as they recalled them. To minimize social desirability bias, interviewees were not appraised of the ratings they would give events, or how events were selected for discussion. On the part of the interviewer, interviewer bias was minimized in the interviews by following a standardized protocol across all interviews. Bias was also minimized in the analysis by applying a pre-existing framework to look for cross-cutting themes. However, selection bias of participants cannot be understated, as many of the participants were drawn from the researcher’s network. Because of this, a high number of participants reported being involved in social activism or community work. For this sample though, these activities were salient to the participants’ identity formation.

**Future Research and Public Health Implications**

There were some issues that this study brought up that require further exploration. First was the idea of discrimination and stigma around whiteness in a Hawai‘i context. More research in the continental U.S., mainly critical whiteness studies that examine the construction of whiteness in society and institutions have examined how the mechanisms of racial oppression work (Owen, 2007), and how even in a diversity framework, whiteness can be protected (Hikido & Murray, 2016). More research should be done to expose the nuances of what it means to be multiracial white in a Hawai‘i context, as whiteness was found to be an issue among some of these participants. Second, while some life course research exists among adolescent identity development, more should be done to understand adult racial and
ethnic identity development over the life course. As demonstrated in this study, the oldest participant was still participating in work that affected her identity well into her 60s. This could mean that linear identity theories posited by Poston or Phinney may not end with a “resolution” or “integration of identity.” Furthermore, professional identities were also discussed in this interview, and therefore, looking further at the interaction between life phases (e.g., youth, college, parenthood and professional identities) could reveal more information about identity over time. Lastly, additional analyses could be undertaken on this dataset, including using a grounded theory approach to develop a new identity development model, and a formal mapping of different identity touchpoints onto the racism and health framework. Additional analyses using Choi-Misailidis’ (2009) and Rockquemore and Brunsma’s (2002) models could be done as well.

There are a number of implications to be drawn from this study. First, both mental health and physical health practitioners may want to pay more mind to developing interventions across the life course, using the ecological model. The findings from this study point to family and schools as potential sites for more interventions to, at minimum, alleviate some of the stressors that were discussed by participants in this study, especially in earlier life. In looking at families, providing tools for parents to communicate and support their children as they navigate their identities are needed. At schools, more anti-discrimination or anti-racism training, plus cultural competency around multiracial issues for teachers and administrators are needed. Courses in middle and high schools that mirror some courses at the university level, such as ethnic studies or use of alternative pedagogies, should be considered. Active learning courses that include cultural components, including history or other cultural activities, that target “deep culture” as opposed to surface culture are another possibility. For example, increasing opportunities for activism or community service as part of programs may be one way to instill identity and purpose for participants. These types of programs may be called for among adults as well, since participants in this study discussed many of these community-centric activities in young adulthood.

Second, intervention designers should consider the number of ways and intersecting identities (gender, sexual orientation, age, and racial/ethnic identity) influence their target population members at an individual level. To be culturally competent as a practitioner to address this myriad of nuance may not be possible. Alternative training frameworks such as cultural humility in health (Tervalon & Murray-García, 1998) may be worth considering. Lastly, practitioners should consider using the racism and health framework (Williams & Mohammed, 2013a) to help elucidate the reasons for health disparities and how to best address them. As the framework is wide in breadth, it provides a number of opportunities to design interventions to improve public health, both physical and mental.

Conclusion

In sum, this study examined the ethnic and racial identity development of ten multiracial adults residing in Hawai‘i using a life course perspective and comparing participant narratives to one health framework and two racial identity frameworks. Participants discussed a number of issues related to racism and mental health over the life course. Identity labels used by participants broadly fit into two
theoretical frameworks of multiracial identity. More research is needed to better understand identity development in context, and how that affects multiracial people’s well-being.
CHAPTER 5. DISCUSSION, RECOMMENDATIONS AND CONCLUSION

Three studies were conducted for this dissertation around the topic of ethnic identity status and development and how ethnic identity relates to mental health. In the first study, the psychometric properties of an ethnic and racial identity status scale were tested with a sample of multiracial adolescents living in Hawai‘i. The second study examined the relationship between identity status, self-esteem, and depression among the same sample. The last study examined how key events in the lives of multiracial adults living in Hawai‘i affected their ethnic and racial identity development, and how their identity and mental health were linked over the life course. This last chapter synthesizes the key findings from these studies, recommendations for health practitioners and policymakers, and offers recommendations for further researcher.

The main findings from this dissertation were (a) multiracial adolescents endorse a five-factor identity status model; (b) identity, self-esteem, and depression were significantly related to one another; (c) key events in multiracial adult lives had effects on their racial and ethnic identities, and for some participants, these events and changes in identity were closely related to their mental health. Additionally, the events participants cited were spread across the different levels of the ecological model, including at the policy, institutional, community, and interpersonal levels, which suggests interventions at the individual level may not be enough to support the ethnic identity and self-esteem of individuals facing identity challenges. Furthermore, the second study provides quantitative support for the finding in the qualitative study that for some individual’s identity and mental health, both positive and negative, were strongly linked. Events discussed by participants also demonstrated the utility of the racism and health framework (Williams & Mohammed, 2013a) for people of multiracial heritage.

Based on the findings from these studies, health practitioners and policymakers should consider the following recommendations across the ecological model. At the policy and institutional level, demographic forms should be changed to provide individuals the option to state the different racial and ethnic groups they belong to. Some of the issues that participants in the qualitative study discussed related to the racism and health framework require policy level interventions. These include improved societal resources related to housing, creating more socioeconomic opportunity, policies related to racial discrimination, and modifying political and legal institutions. At the institutional level, researchers should also endeavor to report on multiracial respondents in their reports to help better capture the mental and physical health outcomes of multiracial people. Intervention designers should also consider the myriad ways multiracial people may hold different identity statuses. For example, programs that are tailored to certain racial or ethnic groups may work better for multiracial individuals with a singular, integrated, or appreciative ethnic identity status as opposed to those with either an internally or externally marginalized identity status. Schools and universities should provide more opportunities for all students to take ethnic studies so that students can be exposed to different histories and perspectives to help build identity and a sense of belonging for all students, including multiracial students. Additionally, institutional- and community-level interventions can have ramifications for community- and interpersonal-level stressors,
such as negative stereotypes, stigma, and prejudice. Fostering more understanding of the multiracial experience at these levels may help to reduce negative individual behavioral health, increase ethnic and racial identity and self-esteem, resulting in more positive mental health.

The following are recommendations related to future research about multiracial identity and health in general. First, while the relationship between identity and mental health has been explored (albeit not extensively), not much is known about the relationship between multiracial identity and physical health. More needs to be done to examine whether these are related to one another, as posited by the racism and health framework. Second, researchers should work to further test the psychometric properties of the M-HAPA Scale in different contexts, such as among multiracial U.S. youth. Because the scale’s underlying theory is based in changing identity status, researchers should consider using the scale in longitudinal studies among both adolescents and adults to understand identity changes over the life course and how these changes related to both physical and mental health. This is important as the social conceptions of multiracial people have changed historically. Third, while quantitative studies can demonstrate a statistical relationship between identity and mental health, the qualitative methods used in this study provide more information about the events that affect identity formation over the life course. Studies that combine both qualitative timeline methods with longitudinal study designs should be considered when examining identity development and changes to identity over the life course. Lastly, health or education interventions that include cultural components need to be evaluated for changes in participant identity and disseminated in a centralized fashion (i.e., specialized journal or journal supplement) to aid other researchers interested in identity.

Dissemination of this research is planned in a number of ways. A number of journals that have accepted research in this area have been identified for the quantitative projects. Ethnicity & Health has featured a number of articles on culture and identity and its relationship with health. Alternative journals include Journal of Adolescent Health, Journal of Adolescence, Asian American Journal of Psychology, and Cultural Diversity & Ethnic Minority Psychology. Target journals for the qualitative study include Ethnicity & Health and Social Science and Medicine.

In conclusion, the findings of this dissertation further support the idea that ethnic and racial identity are uniquely related to self-esteem and mental health. This dissertation also found support for five different ethnic identity statuses for multiracial adolescents living in Hawai‘i, a state with the highest proportion of multiracial people in the nation. As the multiracial population is set to grow both nationally, policymakers and health interventionists should consider further consider how events—both positive and negative—across both the ecological model and life span affect multiracial identity and health.
Appendix

Below are the narrative reports produced as part of Chapter 4. Each narrative report includes descriptive information the participants gave as their ethnic and racial identities, a description of the three to four events they discussed, how the participants saw the relationship between their identities and mental health, and a few summative questions.

Narrative Reports

Asian-White Millennial Male. This participant identified as biracial, though in the interview, the participant indicated that at other times they had previously identified as half-White and half-Asian. He had also identified as hapa haole but stopped using the term after learning how it had been co-opted by other, non-Native Hawaiian communities. During the interview process, he indicated three periods of time that were salient to their identity development: a longer span of time from “birth to high school graduation in Hawai’i,” joining a “Pacific Islander Club” at a university on the West Coast of the U.S., and “working at an activist organization” focusing on the Asian Pacific Islander community, also on the continent.

During high school, “A” discussed wanting to know more about what their identity was and meant, and taunts by peers: “getting called like haole this or white devil that. It’s like even in jest… there was still the understanding of yeah, that’s different than being called like a clown or something a little more neutral.” This resulted in him learning how to play up his Asian and local identities to gain more acceptance but recalled that these conflicts did lead to some anxiety and stress. Some of this continued during his time in a Pacific Islander Club at a U.S. West Coast university. He gravitated toward this organization since it reflected some of his cultural experiences being raised in Hawai’i. He met Pacific Islanders from not just the Pacific, but from across the continental U.S. Being on the continent far from Hawai’i, led to a shared experience that created common ground between those from different towns and ethnic enclaves. This was extended to how he experienced others’ perceptions of his identity:

Oh, you’re [Asian], what does it feel like to be Asian American? And then for me to ask myself and then respond to them and saying, “Well, I’ve never identified as Asian American.” And then having to unpack that of how problematic identifying as American in Hawai’i is, what that means, why people in Hawai’i who are Asian don’t identify as Asian American.

Being on the continent, he reflected on how he was able to “code-switch” and become a “chameleon” to navigate spaces. Lastly, he discussed his time at an activist Asian and Pacific Islander organization. He mentioned his “white guiltiness” he felt growing up in Hawai’i manifested as imposter syndrome leading him to ask “Am I hurting the organization? Am I hurting Asian Americans at large…?” Because the organization assisted Asian Americans, he was unsure of the label: “I don't feel like I'm an Asian American even though everything, all the people I'm meeting are saying about what it means to be Asian American” which led back to “I identify as biracial. I'm born and raised in Hawai'i.” This led to some stress related to their work at the organization which they said was about the same level as the stress and anxiety they experienced growing up in Hawai’i.
In wrapping up the interview, he reflected that his multiracial status may have hindered romantic partnerships, but because of presenting more as white has affected accessing communities. He felt that their identity and mental health were “intertwined” and talked about how insecurity about their identity was related to their mental health. He mentioned he learned throughout his life “that people seem to be so hungry for connection and a sense of belonging and community. So much so that they will read and project onto you an identity or a label that helps them categorize you.” In closing, he reflected that he wanted others to understand that there in being biracial there was a “cultural richness to pull from… [the] freedom that that might provide on the other side is the torture… of mental challenge of not just being one thing.”

Asian-White Generation X Male. The second participant was an Asian-White male from Generation X. He stated that they had grown up identifying as hapa haole, often leading with their white identity, but then later switched to Asian Pacific Islander after working for an activist organization. The three events that he discussed were his father’s abuse, mom meeting her “good haole husband,” and finally, working for an activist organization on the U.S. continent focusing on gay men of color.

He documented the first event in great detail, including a fight between his parents and the separation of his parents, which led him to associate “brown men with abuse,” which was reinforced in his mother’s subsequent relationships: “…she was a single haole mom, and for me that felt safe, but the people that she always brought around were brown men that were abusive. [Expletive] abusive.” He related this to how he identified racially:

I mean, that's really big for me when I tell you that I always identified as haole first, you know, like, 'But I'm haole, but I'm white.' … I would say those things because of the shame I felt at the attachment that I was in a guilty by association.

The second event he discussed was his mother’s marriage to a haole man, which was a positive change for him because “we had money. We were going to the commissary. We had brand name food, you know what I mean? It wasn't cheap cans anymore.” This period of time amplified how he identified: “…it made me feel like the white side. It reinforced the idea that the haole side of me was much better than the brown side of me.” During this time, he began to use drugs and alcohol, which he attributed to the experiences he had and his identity conflict: “I never felt like I fit in. That was never brown enough, I was never white enough.” The last event he discussed was his membership in an activist organization for gay men of color. Through doing this work, he said “I had an identity. It felt like I, I fit in. It felt like I finally found a place where I could say that I was proud of my brown heritage.” He found that by working in this organization he was able to find other men who shared the same experiences, which was “empowering” and caused him to change his identity: “… now I identify as [Asian] and I say I'm Asian Pacific Islander, first foremost because that's how the world sees me and that's how I see my myself.” The dual embracing of both his ethnic identity and sexual orientation led to a “freeing” so that he could “work on everything else.”

When asked if his multiracial background affected any of his life chances, he discussed the intersections between whiteness and class in Hawai‘i, but also how his Asian grandparents also helped to
reinforce Westernization by emphasizing English speaking without an accent. He related his identity and mental health this way: “I’d say in my formative years, what made me the alcoholic, what kept me running was those identities. And then once I found it, you know the empowerment, I felt relieved.” In summing up his experiences as a multiracial person, he said the main thing he learned was “That I matter. I think that's, to sum it up that I matter.” Finally, in closing he relayed that he wanted others to know “that they're not alone, that those feelings are real and they're okay” and “That my experience is not unique in that if, if anything that I've gone through in becoming who I am today as a brown man, matters is that you don't have to do this alone.”

Asian-White Baby Boomer Female. The third participant was Asian-White and a Baby Boomer. She described their racial identity as hapa haole, but because they had moved abroad, her identity became simply “American.” The conversation with her concentrated exclusively on her experiences in the school system. In relaying her experiences in elementary school, she brought up racism and discrimination she experienced: “Well, I, I realized that it very, pretty early, second, third grade, um, that the teachers were very racist and I, you know, they were almost all [Asian group].” She discussed that there was a hierarchical system of friendships based around racial and ethnic identity: “I said [to my friend], haven't you ever noticed all my friends were all hapa? We were almost a forced into a group…” and moved on to discuss how different ethnic groups stuck together. She discussed other incidents regarding race, and her father’s experiences of discrimination at work due to being White. She then discussed how this time made her feel that everyone was equal out of a reaction to being prejudiced against. In the second event, she recalled was how her English and lack of pidgin made her stand out among her peers, which also further ostracized her from her classmates. When asked about her thoughts and feelings about this event, she talked about how she lacked resources to address the situations she found herself in at school: “My Mother didn’t speak very good English and she couldn't drive or anything. It's not like I could get help. My father was a, well, he was always working.” During this time, she discussed that she met a teacher who was also multiracial and felt that there was less racism during this time at the school, but after transferring to a different middle school, she later felt the new school with more Asian teachers was also more racist leading her to develop a “Fatalism that it was like, well this is how it is.” The last time period she discussed was high school, in which she said was a difficult time because of ethnic relations at the school. She described a large fight that she got into, but also described how her and her friends sought help from the counselors to no avail. She also described many other issues in trying to fit in, including attempts to join the cheer squad and even transferring schools. These things led her to feeling like “I didn't have a lot of confidence in myself, so I think that was the biggest part of it and not, not getting support from the teachers and being biased against.”

In reflecting on her experiences, she felt that her multiracial status affected her educational outlook from “being put down all the time.” She related her mental health and identity to the struggles she faced being hapa haole and outgroup status, which she linked to the racism in the state: “there so much racism in Hawai'i. So it's has affected my life.” This led her to say the main thing that she learned in her
life as a multiracial person was “Well, not to be racist,” and when reflecting on what she would want others to understand about her experience, she said “That it’s not nice to be mean.”

**NHOPI-White Millennial Female.** The fourth participant identified as mixed, but also used their different ethnic backgrounds. She also identified as half-White and half-Pacific Islander, but also just Pacific Islander family in their home country, going to a college in Hawai‘i and a particular course at the school, moving to their parent’s home country, and visiting their White family on the West Coast. In recalling her first trip visiting her grandparents and rated it as important since it provided her with insight into the experiences of her mother’s childhood. She mentioned that seeing how dark her grandfather was and how different the food was compared with growing up in Hawai‘i. While she never doubted their Pacific Islander identity, she said, “kids my age or they wouldn’t know or they wouldn’t be like totally believing me at the time, which I think made me angry.” She said they sometimes felt shame in not knowing what is meant to be Pacific Islander, which she attributed to people not knowing about her family’s island, generalized stereotypes about Native Hawaiians and other Pacific Islanders at the time, and the lack of general Pacific Island history or studies in Hawai‘i schools while growing up. Visiting her mother’s home island provided more meaning to her identity and “alleviate that shame.”

The next event she discussed was taking courses on the Pacific at a university in Hawai‘i. By learning about both Hawaiian history and nuclear testing in the Pacific, she developed a new sense of purpose to help people in the Pacific while developing a new indigenous and political identity, which led her “to know myself in a different way, in a deeper way and to know my family and our history is in a different way in a way that’s valuable.” Because the course helped her understand colonialization, it also called into question her European heritage, leading her to “[getting] over the fact that I was haole at some point.” She talked about was moving to her mother’s home country in the Pacific, an experience she felt was rewarding because she was able to make contact with other activists who were interested in the same political and historical issues, but led to issues with her extended family because of a lack of interest in the same topics. Others were unable to understand why an outsider would be interested in the local history, traditions and culture. This outsider affiliation was also based on stereotypes of what Americans did or enjoyed: “they make all these assumptions about what kinds of things I like… That I consume a lot of McDonald’s.” In spite of these issues, she made connections with a number of older cultural practitioners who found value in the work and research she did. The brevity of the interview allowed for a fourth event to be discussed of her choosing, from which she selected visiting her family on the West Coast because “I didn't really talk about my haole side.” She expressed that these visits were “complicated” in that sometimes it is hard to relate to the family, while other times it is easier: “I think this kind of like brings me face to face with that and challenges me to think about the ways that I relate to my whiteness and stuff.”

When asked about whether her status as a mixed person prevented anything in her life coming to fruition, she said “I think if I was just a white person, I'd have a lot easier time. I wouldn't even have to
examine my identity if I didn't want to.” Her identity was related to her mental health this way: “I think that identity has always been up and down for me… I think in new circumstances, new contexts that I have to confront identity again… those times are really hard.” She said the main thing she learned was that “I don't really belong, belong, belong anywhere and that I do belong in a lot of ways to, of different places… I feel like I don't belong to one place, but I feel I belong to all those places.” She closed by saying, “I want people to understand that the Pacific is important and that we have valuable culture here.”

**NHOPI-White Generation X Female.** The fifth participant listed a number of different ethnic identities that she uses to label herself but has also used part-Hawaiian and hapa in the past as labels. The three events she rated highly and spoke about where her naming, moving to Hawai‘i, and her involvement in the sovereignty movement. Her name was part of what she described as a series of “interventions” as she grew up on the West Coast and has fair skin. Other “interventions” that she discussed were visits from her grandparents, food and music. She also discussed how blood quantum affected this her Hawaiian identity, saying “I'd be very apologetic about, you know, like, oh, ‘I'm just a little… I'm white and Hawaiian, but I'm just a little bit.‘” She discussed both external validation of her identity from a classmate, and external challenge she experienced while from a woman from Hawai‘i while visiting a friend’s house: “she’s kind of telling me that if I was from Hawai‘i I wouldn't be sitting on the couch, like making all these kinds of weird qualifications of what's legitimately either from Hawai‘i or Hawaiian.” Regarding her mental health, she said “I think that when my Hawaiianess was questioned that took a toll on my self-esteem” but that she didn’t face discrimination being white-passing. She has used these for to her advantage in being more outspoken.

The second event she discussed was moving to Hawai‘i to be with her grandmother after her grandfather passed away. She said that moving in with her grandmother was “just like culture shock at every turn” and recalled one of the cultural clashes she experienced in nearly getting into a fight with her aunt, “reinforcing this idea that I need to shut up and listen and kind of be a little bit more observant.” Her grandmother served as “the pillar of my development as a Hawaiian.” She made clear the distinctions between race and indigeneity regarding her identity: “I learned that race doesn't always translate well. It doesn't take the place of indigeneity. So indigeneity, learning and understanding that which is more appropriate I think in terms of Hawaiian, thinking about myself as Hawaiian.” The third event she talked about was about working organize against federal recognition of Native Hawaiians as a federally-recognized tribe, as recognition would hinge on blood quantum, which in her earlier life “was the source of my anxiety and confusion and was the thing that made me not know how to even answer what my nationalities are with without fumbling over a string of apologies.” She went further by saying “the American framework, like for racializing indigenous people is through blood quantum serves to erase.” Helping to reestablish different Native Hawaiian practices and work against federal recognition were good for her mental health, but “the internal dynamics of activism that can be horrible at times.”

She felt that her multiracial status did not affect her future plans from “panning out” and in relating her identity and mental health over time, she said “I mean I think pretty intimately, you know, it's definitely
not the only factor that impacts my mental health, but it may not even be the primary factor that impacts my mental health” and that being able to draw on cultural values were also important to her mental health. In closing, she shared that being multiracial “creates abundance because its multiplicity of culture, of stories and experiences of struggle” and also race and multiraciality is “tethered to systems of power and that shapes who I am.” Lastly, she shared that she wanted others to understand about her experience:

I think I would like people to understand that whatever sets me outside of a pure sense of Hawaiinanness is what is the very, are the very gifts that I bring to the collective… Because most of us are multiracial, the challenge is for us to rethink what is even Hawaiian and I think we can do that in a way that takes ownership in the sense of all of the multiplicity of ourselves, which creates for just an incredibly strong, multitalented international, you know, lāhui.

Asian-NHOPI Millennial Female. The sixth participant said that they described themselves as Asian and Native Hawaiian but have used other ethnic identity labels and ways to describe themselves throughout their life. She rated three events very highly on their lifeline: a period when they were younger with domestic violence in the home, meeting a mentor, and attending graduate school. Because the interview ran short, a fourth event selected by her about moving abroad to Asia was also discussed. In relaying the first event, she talked about a cultural clash between her parents, wherein her mother’s family had a history of domestic violence while her father’s family “sweeps problems under the rug.” She illustrated it this way: “my idea of being Hawaiian was a lot of violence because that’s what I saw from my Hawaiian family. And not just physical violence, verbal violence, violence,” while she described her father’s family as “two-faced.” These issues caused her to feel “trapped a lot… I felt like there was no place to go and I felt like I had to… do that balancing, not just for the sake of my family but for myself.” She mentioned that this time period affected her mental health and her development: “I mean I was mute. I feel like I was mute until I was in third grade and my, I don’t even feel like I was talking in third grade.” Even so, this time period foreshadowed some of the future professional work she would undertake and further self-exploration outside of her family about her identity. The next event that she discussed was meeting a mentor. Though she felt mute at the start of their relationship, she offered to volunteer and become part of her mentor’s community. She said, “I learned more from her than I did from that program as who I am as a Kanaka and who I am as a woman. And she taught me a different way of being Hawaiian,” in direct contrast to what she felt she learned previously. She further related this to her identity as a multiracial person: “And I think as a multiracial person, you’re kind of always dealing with, am I this am I that am I this am I that?” Her mentor provided her with an example of how to be all of her identities: “it’s okay to have an [Asian] identity and be proud. And it’s okay to be Hawaiian and proud.” Through this relationship, she talked about learning different ways to solve problems and to seek healing in the environment.

The third event she discussed was graduate school, which for her meant “there’s this awakening of consciousness that happened in graduate school that has made me comfortable in my multiracial identity and have given me words to talk about it.” She says academia allowed her to “carve out spaces... where we get to talk about what it means to be who we are.” When asked about how this time period
affected her mental health, she felt that in unpacking some of these issues that “there’s retraumatization but then I think in graduate school because we get to unpack it together and just learning from other scholars, you learn how to heal.” As there was additional time still allotted in the interview, she discussed another event related to the episode described above of living abroad on a military base. During this time, she described being forced into a binary: “…the military ethnicities were almost binary. There were like little bits of [Asians] here and there’s like a very small group of Hawaiian[s]… So I was placed in this binary, this black and white black and white binary.”

Overriding this racial and ethnic binary stratification was a nationality of “American” which was enforced across the base, such as singing the National Anthem daily. She felt served to further erase her multiracial identities, and noted the racial hierarchy was apparent in the ranks of the base, with the officers and spaces for officers mainly being a white domain. This was also replicated class-wise on the base, with officer housing being much nicer than that of the enlisted personnel. She personally experienced issues related to other peers exercising their power and privilege over her. During this time, she mentioned the values she had learned had become erased by being on base, which affected her identity: “I was more comfortable being multiracial in the beginning before I was before spiraling down into this conformity.”

When asked about whether her multiracial identity prevented achieving anything in her life, she said: “Like if I was just Hawaiian, I was just haole, I would kind of know where I stood or who I was throughout my whole life… And then I could have focused on unpacking just that ethnicity alone.” When asked to reflect on whether she saw her identity and mental health related in anyway, she expressed that over time both had gone from negative to positive. In wrapping up the interview, she said the main thing she learned being a multiracial person was “you don’t fit the mold. You’re not, you’re not this or that. So you kinda gotta pave your own way.” When asked about what she wanted others to know about her experience, she wanted people to value all her ethnicities as these are what make her whole: “I think I want them to celebrate, celebrate these different ethnicities. I want them to celebrate differences so that we can all come to us so that we can create safe spaces.”

Asian-NHOPI Baby Boomer Female. The seventh participant identified as Asian-Hawaiian but mentioned “I am way more [Asian] than Hawaiian in blood terms.” Over the course of her life, she moved from an Asian only identity to an Asian-Hawaiian identity later in life, though she mentioned that she “never saw myself as being [Asian] or Hawaiian.” The three events talked about during her interview were living with her Asian grandparents, working at a private school, and then working at a non-profit.

In growing up with her Asian grandparents, she recalled many food-related stories, as her grandfather was a chef. She mentioned: “although we were Asian-Hawaiian, we didn't really exercise the Hawaiian part a lot except to go visit the grandparents.” When she moved from her grandparents, she discussed how she was encountered other cultural groups in school: “schools that were typical, a mixture of various cultures, not [Asian] only and certainly not Hawaiian only either.” She also discussed ethnic issues in her family regarding dating relating a story from her time in high school where her father
questioned whether a classmate who asked her out for a dance was of a different Asian ethnicity than her own family’s. In thinking about her identity, she relayed a story about her cousins who lived on the U.S. continent: “…we have cousins who lived live in California and other places and I guess their lifestyle is a little more, more ethnically limited because they were more ostracized as [Asian] there as opposed to here.” The second event she discussed was working at a private school that enrolls students of Native Hawaiian ancestry. She recognized the school needed to do more to perpetuate Hawaiian history and culture because of the socioeconomic realities of Native Hawaiians: “Some people succeed, but a lot of people are still with the historic trauma.” She related this further to cultural assimilation, that while immigrants will sometimes assimilate to their new country in search of a better life, Native Hawaiians were already in their country, and that the arrival of Westerners did not improve their lives but diminished them. Though she worked to perpetuate Hawaiian culture, having an ethnically non-Hawaiian name had “…a kind of a stigma because it only says [Asian] when you first see that name.” Because this was a time period rather than a discrete event, she talked about her mental health in terms of all the different roles that she played in the organization and workplace stress plus personal life issues which played a more significant role in her mental health than did identity. The third event she talked about was working for a different non-profit organization. As she worked to improve the organization’s outlook she faced opposition, some of which was partly couched behind cultural values: “I find that offensive that if people think, well if you’re Hawaiian, you would forgive [organizational issues].” She reflected that her leadership style may have been “non-Hawaiian”: “It was a lot of maneuvering with people. Like I said, probably did not strike some people as being Hawaiian because it was like maybe pushing harder than some.” A number of people resigned under her leadership because they were using work time to work elsewhere. During her time at the organization, she worked toward advancing Native Hawaiian issues through lobbying efforts maintaining grants.

When ask about whether there were any opportunities in her life that were denied because of her multiracial status, she reflected that it did not: “I accomplish what I accomplish is as a person, not necessarily because I’m [Asian] or because I’m Hawaiian.” In reflecting on her identity and mental health, she said “I think mentally I don’t think I haven’t been affected by it,” but she did mention that she works to set the record straight about Native Hawaiian history. In reflecting on her life, she said the thing she learned most as a multiracial person was “That we’re richer for being multiracial. We’re lucky that we live in Hawai‘i where people of all ethnic backgrounds are, and we get along.” And on reflecting what she wanted others to know about her experience, she said “you don’t really control how you look, and I don’t know that that should influence how you deal with people. It should be your own self-worth or… what you have to offer.”

**Asian-NHOPI-White Millennial Male.** This participant identified as Caucasian-Hawaiian, though when younger, he exclusively identified as Hawaiian, and mentioned toward the end of the interview about some of the Asian ancestry groups he belonged to but wanted to have his son learn more about those groups, and “my [Asian] stuff I got still gets pushed under the rug.” He was more open to learning
about those groups at this point in his life. The three events he discussed were moving to a Hawaiian homestead, graduating from a private school combined with going to a college on the U.S. continent, and then working at the private school he attended previously.

In the first event, he talked about how moving to the homestead involved going to an elementary school that emphasized Hawaiian culture and activities, like learning Hawaiian language and learning hula: "it made us appreciate cultural stuff more because we didn't really get it that much from home." Living in a Hawaiian community meant being Hawaiian was celebrated. While discussing this time period, he reflected on moving onto middle school, though he rated middle school as a “1” on his timeline where students “identified as ‘Hawaiian’ as ‘I’m from Hawai’i’ but not [Native] Hawaiian. And then for whatever reason, in middle school I suddenly looked white, so I kinda got kinda got the haole thing every once in a while.” Later, he related this to his mental health by saying it “made me more aware of the sense that people tease each other for stuff like this, for just being [a] different race. I guess that was just made me more aware while I wasn't really directly affected by it.” Overall, he said his time living in the Hawaiian homestead was “a very positive experience.” The second experience he talked about was his time attending a private boarding school. As he lived in the dorms, he discussed being homesick for a little while, but was able to make connections with students from other neighbor islands and these friendships extended into his adulthood. Although he had some struggles academically, he said “we were forced to take Hawaiian culture and Hawaiian history was two classes that were easy to me.” These experiences contrasted with his experience in college: "it made me more proud to be Hawaiian when I was there because it was so, it felt so white." He further explained what he meant by this:

[a school club] had a lūʻau and said let's go to that because that sounds like, "Oh, it's like going home like a home away from home type of experience." But it was like what a lūʻau is in movies, like not one food was Hawaiian except pineapple… They gave out plastic leis like what you get from like Oriental Trading. They did a really offensive hula that people in the mainland think what hula is. That was the first week of being there, so it was a bad first start.

Because the school’s minority groups were smaller and the overwhelming number of white students, many of the clubs that centered on minority racial identity, such as the Black Student Union, mutually supported one another. Regarding his mental health, he said having other Hawaiians around was helpful and helped him succeed in college, and that the mutual support that the student groups provided one another was also probably helpful. The last event he discussed was returning to the same private boarding school for work. He consulted with his mentor at the school about how to proceed in applying for jobs, and after several attempts got a job working with his mentor. He now works to transmit some of the local culture and history to students through different means, such as field trips. In reflecting on how this time affected his identity, he said that he is still learning about Hawaiian culture and language which is “forever cultural learning, which I appreciate.” He felt that his mental health during this time period was both positive and negative. On the positive side, he said that the job was great, however, the work stress has a negative effect on his mental health.
He reflected on whether or not his status as a multiracial person negatively affected his life this way: “No, I can’t think of anything but… I’m still 50 percent Caucasian so people might already assume that I’m Caucasian, so that could be part of a reason why those things had been generally okay.” He felt his identity was strongly and positively related when he was younger, but his mental health and ethnic identity have become more uncoupled as his mental health has become more coupled to his work identity. When asked to reflect on what he learned as a multiracial person, he said, “I don’t think about it, but then after how much I talked about it already today, made me kind of realize how proud I am of being mixed race.” Finally, when he was asked to reflect on what he wanted others to learn from his experience, he said: “No matter what, there will be challenges throughout life that make certain things harder… They are overcomeable if you make efforts to make things better, so don’t quit and things work out eventually.”

**Asian-NHOPI-White Generation X Female.** The ninth participant described her current identity as multiracial but had described herself as local Hawaiian previously. During the interview, she discussed three different events related to her identity: visiting her mother’s home country in Asia, participating in a pre-graduate school educational program, and then going back to their mother’s home country after the passing of a relative.

In discussing the first event, she reflected on this first trip to Asia as they were just an infant. They thought this time period was important as it was the first time meeting her mother’s side of the family. Additionally, she thought that the trip shaped her identity: “I think it shaped me in a sense that it added more to my identity… I also have this other part of me and it’s still a very, very dominant part of myself.” During her youth, she struggled with the fact her parents had differing religious backgrounds and also noted cultural differences between American and Asian orientations. Examples she cited of this included differences in sharing of meals. She also talked about how being multiracial meant that she had a hard time finding a peer group, or as she put it, “I didn’t know where I fit.” She related this part of her struggle to peers not understanding her Asian ethnicity: “[M]y friends that didn’t understand it, or what [Asian country] food was or where [Asian country] was, or my mom’s [religion]... the way we do things where we’re kind of different.” Still, she said that as she grew older, “I realized how significant and how fortunate I am to be a multiracial and a little bit more comfortable in my skin.” The next event related to graduate school training that led to her “whole life [being] changed.” By getting into this program, she was able to “mix the pot up in a good way” at the school, since the student body is “kind of homogenous actually… homogenous even ethnicity wise and homogenous like education, socioeconomic background.” From a professional perspective, by participating in this program, she said that it improved how she does her work: “to be a multiracial [professional has] definitely impacted me in a positive way as far as my [job], how I relate to my clients.” Though she felt that her mental health at the time was good, the stress of starting graduate school and joining a stressful field led her to think, “I did suffer from like depression and it definitely tapped into my anxiety.” These issues notwithstanding, she reflected on the lasting impact on her life and said, “for me it’s just gratitude to this program. I mean, it really was the gateway, the opening.” The last event she discussed was going back to her mother’s home country for
the passing of a family member. Because of family issues during a previous visit, her family were not planning on going to the funeral. She described this incident as “cutting off” and leaving “on very bad terms and it was literally like we’re, we severed our relationship.” She discussed this further in terms of a culture clash between being American and multiracial, while also being part of her mother’s cultural group and managing familial relationships. By going back for the funeral, this was an opportunity for the family to heal, which she related to better mental health: “[I] think I wasn’t looking forward to it, I wasn’t because I wasn’t sure what to expect. But then being there and now thinking back in hindsight, I thought it was a very good thing. It was a healing...” She said that this experience affected her thoughts and feelings this way: “Thing that popped in my head was like, family transcends all cultures, all barriers.”

In reflecting on whether her multiracial status affected her life chances in any way, she said “I think my education kind of my trajectory in my career, my education all tied in. I think I got advantages because of I am multiracial, but I think I got disadvantages well,” which related to accessing programs but also the quality of her high school education. In addition, she mentioned “just not my multi race, but also gender is something that always comes across my mind sometimes even to this day” in affecting her everyday work and interactions. However, she mentioned that in some cases, being multiracial had other advantages: “Another thing to add to that, it was also people understood it and it was actually kind of cool to be mixed in certain places. I think it benefited rather than just being identified as one thing or another.”

In relating her mental health to her identity over time, she said “I think my identity and my mental health had become stronger and better. I struggled with it a lot when I was younger, but I embrace it now.” When asked what the main thing she learned as a multiracial person, she said, “Main thing to embrace it, to own it, to be proud of it, um, to see it as a positive.” In closing, she said that she wanted others to understand “…that we’re not just categories, that most of us are a mixture…”

**Asian-NHOPI-White Baby Boomer Male.** When asked how he identified, the last participant said the following:

I actually don't think about it and don't describe it. If people say what I am typically say I'm part Hawaiian, then I feel kind of bad because that excludes my mom and I'm part her as well. And multiracial is something new to me. So I just say I'm part Hawaiian and other things. And that's for political reasons because I'm pretty successful. I've got to get the Hawaiians boosted.

Later in the interview he said the following about identity labels:

Like when you asked me what are you, Hawaiian? It's like, I don't know what you want me to say. So, I'll just say I'm part Hawaiian of get me through the thing. I don't have to think that, I don't have to explain why. It's just kind of, you're part Hawaiian.

He identified three different highly rated events, which were attending private school, attending a sovereignty conference, and helping to organize a constitutional convention.

In attending the private school, he discussed how he did not understand the myriad ethnic groups he was part of, and then “I went to [private school] and all of a sudden I was placed into a setting where one was Hawaiian.” Because of his appearance, “all of a sudden I realized how different I was... because I was the white boy teased for being a skinny white boy.” He contextualized this event further by
discussing his family and growing up and said, “I identified if anything, and jumping to be the first two to many years, [Asian].” He described how his family would cook with an imu, grate coconuts to make haupia, or eat poke, but did not recognize them as Hawaiian words or practices but as Asian “because my grandmother was [Asian] and my grandfather was a Hawaiian [Asian], I thought I was [Asian].” He reflected on the thoughts and feels that he had after finishing private school in how they tried to take credit for his academic ability and getting into a prestigious continental U.S. university, though such campuses were looking to add more diverse students. In highlighting his story, the private school wanted to interview him, but he declined many of the interviews or would “make up things [about what] you’ve taught me.” He also felt that he did not get enough exposure to a broad base of issues while at the private school: “Then I go to [university] and I’m sitting in this auditorium of how many people? A thousand something… and big Afros—this is 1970—or blonde hair and going, I’ve never experienced this in my life.” During this time, he experienced racial and class distinctions on the mainland as well, witnessing how maintenance and housekeeping staff at both the university and at one of his friend’s home were Black: “and because I had to work, I worked with them but then to be served by someone that was very clear in the class distinction, it was strange.”

The next event that he discussed was attending a sovereignty conference. At this point in his life, he said “it’s like, oh, there’s this thing called sovereignty. And think about it. I was already in my forties and didn’t bother with those things.” At the conference, he heard a number of Native Hawaiian speakers using ʻōlelo Hawaiʻi, to which his wife suggested he take Hawaiian language classes: “And learning through, not just language but what language means in terms of culture, uh, didn’t necessarily make me identify as Hawaiian, but to, to understand and appreciate more some of that part of my background.” He reflected that although he interacted with and met prominent members of the Native Hawaiian community: “I was exposed to all kinds of things, but I never put two and two together” when he was younger. When asked about how this event affected his identity, his reply was “The immediate responses it didn’t, um, it just spurred me to learn the language.” When reflecting on whether this event had any effect on his mental health, he said “No. I thought about that knowing what you may be exploring and no.” The last event that was discussed was a constitutional convention. He worked with a number of people he connected with at the sovereignty conference he attended to construct the process toward developing the constitution, including holding elections, convening for the constitution, then adopting a constitution. However, the election process was stopped by the court system. While he helped to move the process to just holding a convention, he discussed some of the issues surrounding his identity and how the community perceived him: “It’s kind of strange to sit there on behalf of a larger Hawaiian community and be criticized and yelled at and called all kinds of things.” When asked about how this event may have affected his identity, he responded “Remember, I don’t really have an identity as a multiracial or Hawaiian or [Asian] or haole, so I don’t think it really did,” and he did not relate any mental health issues to this event.
When asked whether his multiracial status delayed or prevented anything in his life, he replied “No,” and when asked if his identity and mental health had been related in any way, he said, “If at all? Small… It’s kinda like when you’re a kid and they call ‘you haole boy,’ yeah, I got hurt and it does. Did that affect me in my development and what I do? I got over it.” When asked what was the main thing he learned about being a multiracial person, he responded that “People judge you based on a lot of different factors, some of which are beyond my control and some of which obviously are in my control, but it’s a multifactorial judgment on the part of others.” In wrapping up the interview, he was asked what he would want others to understand about his experience, he stated “It’s great and joyful if you don’t let it get to you.”
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