Physical Activity and Inactivity Among Native Hawaiians & Pacific Islanders in the United States

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Background / Purpose

Physical activity (PA) is important for maintaining and improving health and quality of life while physical inactivity can cause unnecessary illness and premature death. More than half of US adults are inactive. Less than a quarter of adults in the US are meeting the recommended PA levels (1). In-depth research is needed to better understand PA behavior to help promote PA among US adults.

In large national samples, Native Hawaiians and Other Pacific Islanders (NHOPI) are understudied. A better understanding of PA behaviors among NHOPI, and the determinants of those behaviors, are needed to assess appropriate intervention to advance health equity.

Method

- National Behavioral Risk Factor Surveillance System data with detailed PA questions from 2011, 2013, 2015, and 2017 were combined for analysis.

- Types of primary PA and predictors of physical inactivity were described for self-identified NHOPI respondents (unweighted N=6,154), using multivariable logistic regression models including age group, gender, education, income group, BMI, health status, and study year. All percentages are weighted and significance was set at $p<.05$.
  - *Inactive* is <30 minutes of leisure time activity during the last 30 days or not engaging in moderate/vigorous physical activity in a usual week (2).
  - *Recommended PA* level is the equivalent of at least 150 minutes of moderate-intensity aerobics and 2 days of muscle strengthening exercises each week (2)(3).

For more information about this study contact ngocv@hawaii.edu
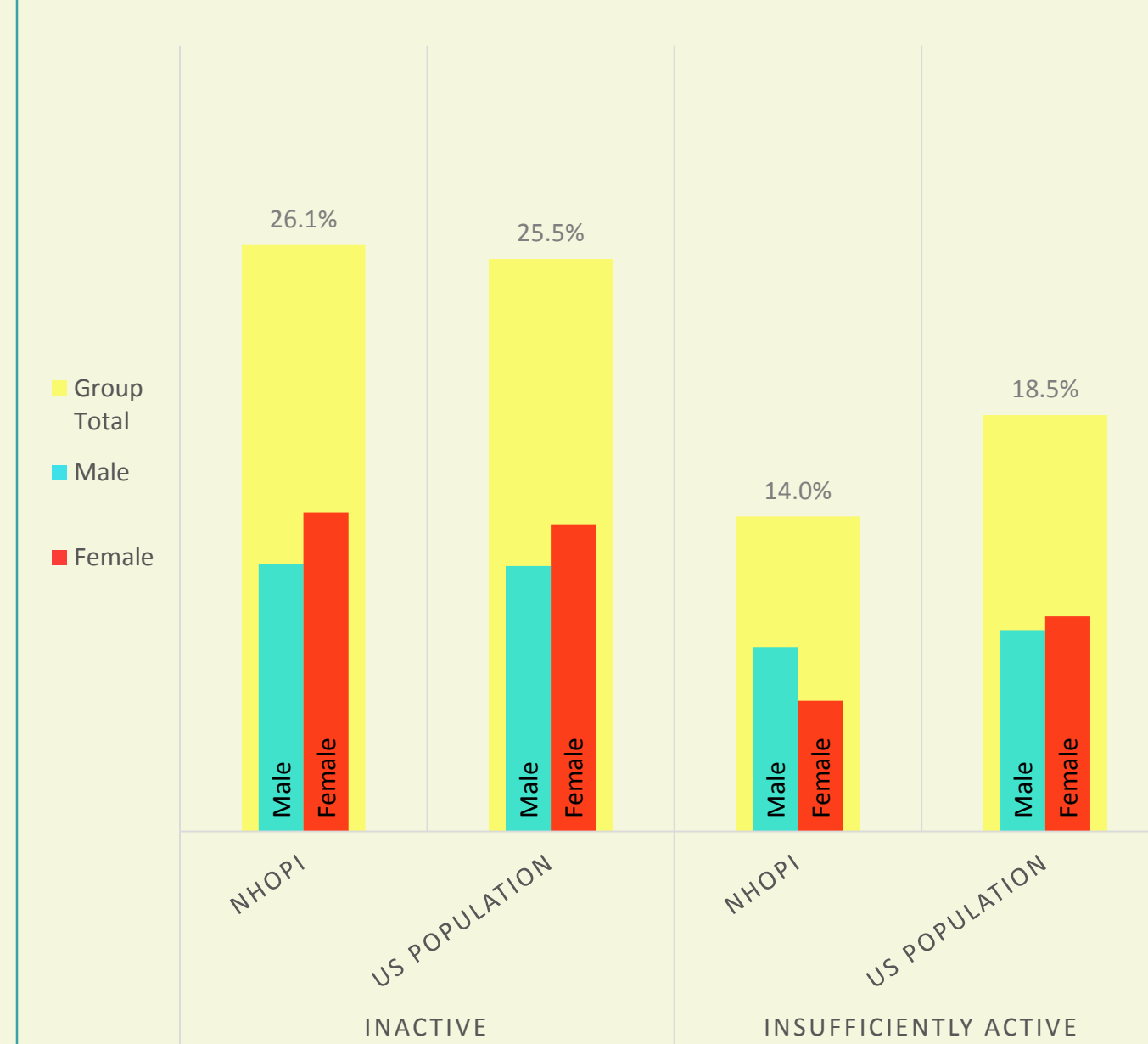
Results
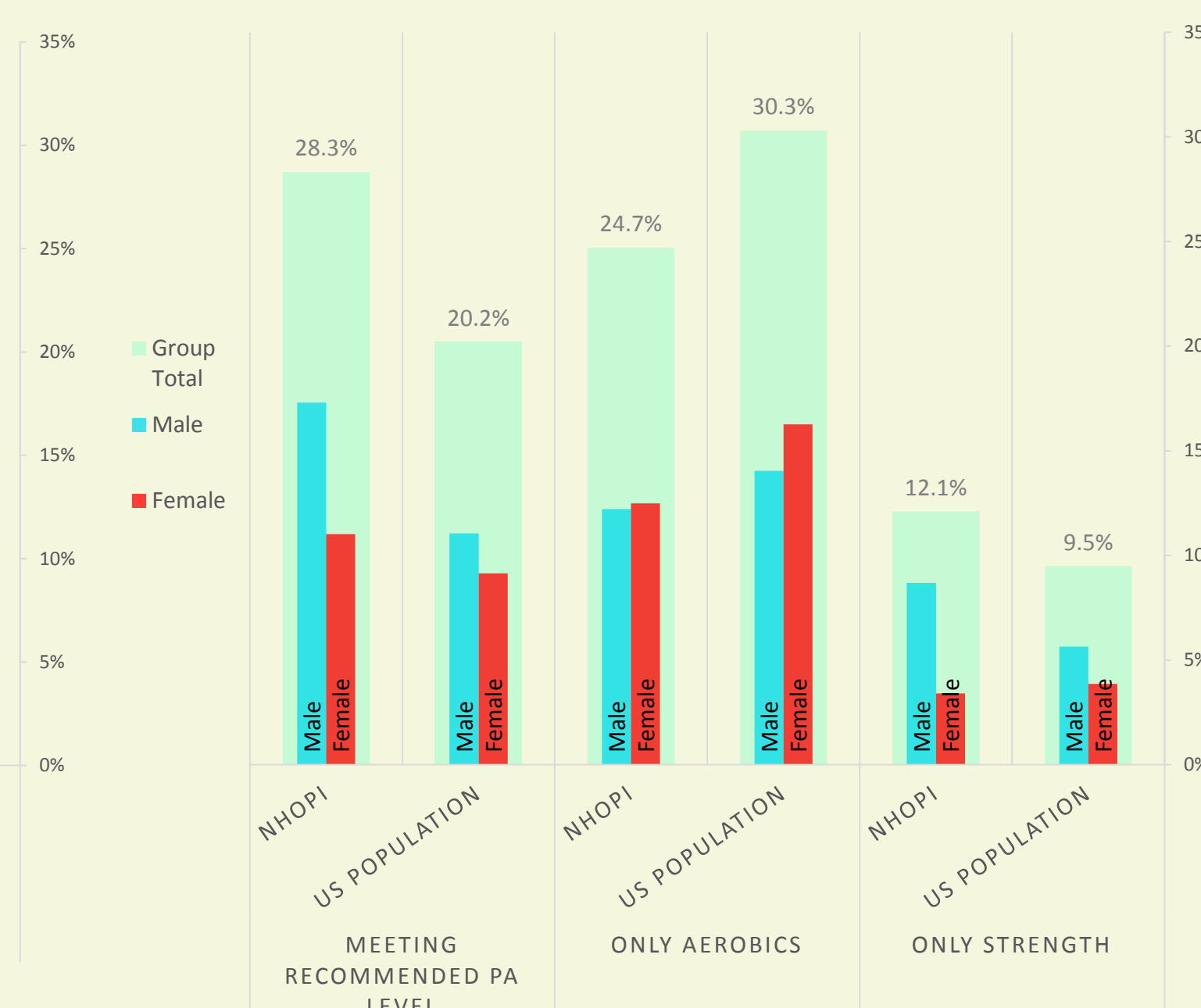
Figures 1 & 2 depict overall NHOPI and US population levels of inactivity and those meeting recommended physical activity guidelines, as reported by participants in BRFSS 2011-2017. Among these groups the figures also show the proportion of male and female.
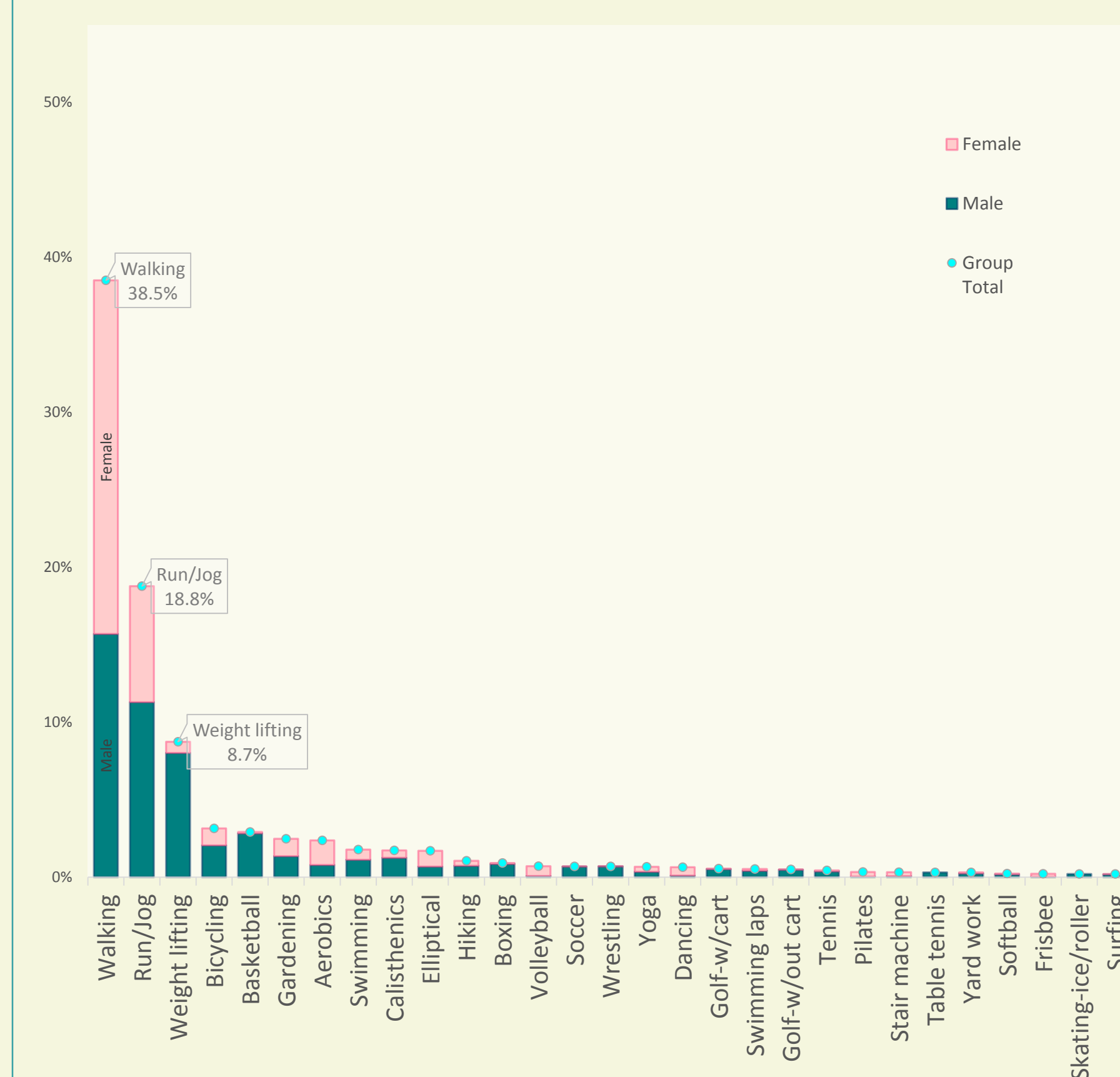

Figure 3 provides an overview of reported leisure-time physical activities articulated with male and female participatory proportions.
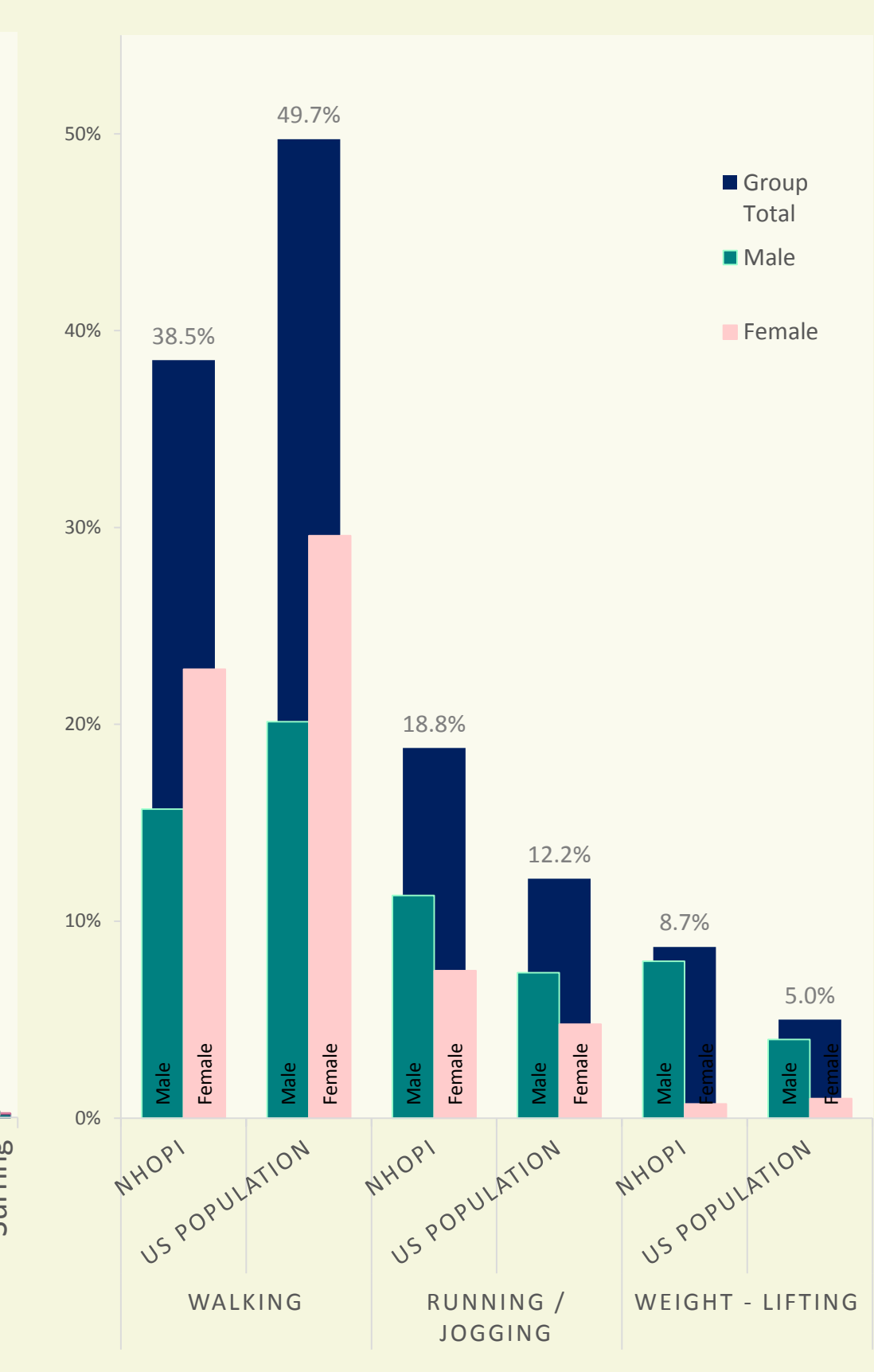
Figure 4 is an enhanced view of the top three primary physical activities among NHOPI and US population with reported proportions of male and female.

Results

- More than a quarter (26.11%) of NHOPI reported physical inactivity.

- Among physically active NHOPI respondents, the most common primary PA types were walking (38.5%), running (18.8%), and weight-lifting (8.7%).

- In multivariable models, physical inactivity in NHOPI was positively associated with being older than 24, being female (OR:1.42; 95%CI:1.04-1.96), having less than a high school education (OR1.60; 95%CI:0.95-2.66) compared to a college degree, and being in the second lowest income category ($15,000-24,999/year) compared to the highest ($50,000+) (OR:1.83; 95%CI:1.11-3.01).

- BMI, health status, and study year were not independent predictors of physical inactivity.

Discussion

Nationally representative sample revealed patterns of particular health equity concern for differences in physical inactivity by gender and social factors (education and income).

Limitations:
- Survey is limited to English/Spanish speakers.
- Does not account for non-leisure PA.

Further consideration:
- Research conducted at state level to better understand disparities within subgroups and socio-cultural factors that may improve PA behaviors in NHOPI.
- PA behavior of the active and insufficiently active NHOPI population but are not meeting recommended PA level.

References

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2.CDC – (2017). *2017 BRFSS Survey Data and Documentation*. Retrieved from https://www.cdc.gov/brfss/annual_data/2017/pdf/2017-calculated-variables-version4-508.pdf

3.DHHS – (2008). *Physical Activity Guidelines for Americans*. Retrieved from https://health.gov/paguidelines/pdf/paguide.pdf