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**EDLD 651 Final Project Outline**

**Introduction**

Historically, men have been understudied and underrepresented in disordered eating research (Braun et al., 1999; Lavender et al., 2017). Yet, increasing and compelling data indicate that young men between the ages of 18-30, in particular, report high rates of disordered eating symptoms (Braun et al., 1999; Strother et al., 2012). Excessive exercise and muscularity-enhancing behaviors may be especially applicable to young men, given the current sociocultural pressures for young men to embody the mesomorphic body ideal (e.g., a lean and muscular physique) (Lavender et al., 2017). Indeed, many men report being dissatisfied with their bodies and a desire to reduce their fat mass and increase their muscle mass (Pope, Phillips, & Olivardia, 2000; Baghurst, Hollander, Nardella, & Haff, 2006). Excessive exercise aimed at enhancing muscularity may function to reduce body dissatisfaction while also simultaneously working towards achieving the mesomorphic body ideal. Although excessive exercise and muscularity-enhancing behaviors are rampant in young men (Spann & Pritchard, 2008), little is known about sociocultural risk factors that precipitate and maintain these behaviors.

Extant data suggest that Asian/Asian American men report the most severe disordered eating symptoms, such as muscularity-enhancing behaviors, across racial/ethnic groups (Kelly et al., 2015; Strother et al., 2012). Indeed, Asian/Asian American men often rate their bodies as smaller than their ideal physique (Barnett et al., 2002). Potential romantic partners also rate Asian/Asian American men as less masculine and more feminine than their non-Asian counterparts (Wilkins et al., 2011). These harmful stereotypes may render Asian/Asian American men especially susceptible to engaging in muscularity-enhancing behaviors in an effort to achieve the mesomorphic body ideal.

Evidently, harmful stereotypes have a profound effect on Asian/Asian American men’s body image and associated disordered eating behaviors. Racial discrimination, in the forms of both overt racism and microaggressions, may be particularly relevant to Asian/Asian American men’s behavioral drive for muscularity (Nadal et al., 2014). Preliminary data suggest that overt racism (e.g., *“Asian Americans were historically targets of racism”*) and microaggressions (e.g., “*a student you do not know asks you for help in math”*) are positively associated with disinhibited eating in young, Asian/Asian American men (e.g., binge eating and loss of control eating) (Kelly et al., 2018). However, no studies to date have identified if experiences with overt racism and microaggressions are linked to muscularity enhancing behaviors specifically (e.g., body building, metabolic steroid use, excessive weightlifting) in young Asian/Asian American men.

**Study Aims and Hypotheses**

This study seeks to examine the link between experiences with racial discrimination, both in the forms of overt racism and microaggressions, in young Asian/Asian American men. It is hypothesized that experiences with both overt racism and microaggressions will be significantly and positively associated with the behavioral drive for muscularity (e.g., body building, supplement consumption, metabolic steroid use, excessive weightlifting, etc.). The study hypotheses are as follows:

*Hypothesis 1:* Experiences with overt racism will be significantly and positively associated with the behavioral drive for muscularity in young, Asian/Asian American men.

*Hypothesis 2:* Experiences with microaggressions will be significantly and positively associated with the behavioral drive for muscularity in young, Asian/Asian American men.

**Methods**

This study was approved by the University of Oregon Institutional Review Board (IRB). Data were collected between January-February 2017. Participants were recruited through Qualtrics Panels, which utilize social media outlets to recruit a diverse sample of survey respondents. Eligibility criteria included being 18-to-30-years-old; self-identifying as male and Asian/Asian American; and English fluency. Participants were asked to complete an online survey. All study responses were anonymous and considered invalid if less than 80% of questions were answered (Dong & Peng, 2013), the survey was completed in < 2 minutes (*n* = 9), or if participants failed to answer “yes” to an embedded validity item (*n* = 52).

**Measures**

*Demographics.* Participants self-reported their age; height (ft, in) and weight (lbs.), from which body mass index (BMI) in kg/m2 was calculated; ethnicity; generation status; geographic region; highest education; employment status; income; geographic region; and presence of a psychiatric diagnosis.

*Experiences with racism.* Participants who identified as Asian/Asian American completed the 13-item Asian American Racism-Related Stress Inventory (Miller et al., 2012). Items were rated on a 5-point scale from 1 (*This has never happened to me or someone I know*) to 5 (*This event happened, and I was extremely upset*). Two subscale composite scores were created to measure experiences with overt racism (e.g., “*You see a TV commercial in which an Asian character speaks bad English and acts subservient to non-Asian characters*”) and microaggressions (e.g., “*Someone asks you if you can teach him or her karate*”). The Asian American Racism-Related Stress Inventory (Miller et al., 2012) has been found to have strong psychometric properties (α = 0.81-0.95). Internal consistency ratings for the overt racism and microaggressions subscales will be obtained and reported in the final manuscript.

*Behavioral Drive for Muscularity.* The 15-item Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000) will be used to assess the behavioral drive for muscularity. The DMS measures drive for muscularity across both cognitive and behavioral dimensions; the construct of interest in the present study is the behavioral dimension (e.g., “*I lift weights to build up muscle*”). Participants rated the frequency to which they engage in behaviors with the intention to increase muscularity on a 6-point Likert scale from 1 (*never*) to 6 (*always*). A mean score of the behavioral items was calculated, with higher scores indicating a greater behavioral drive for muscularity. The DMS has demonstrated good internal consistency among ethnically diverse adult men (e.g., Swami, 2016). Internal consistency ratings for the behavioral items will be obtained and reported in the final manuscript.

**Data Analytic Plan**

RStudio Statistical Software will be used for all analyses. Data will first be screened for normality and missingness. Mardia’s multivariate test will be employed to determine whether data meet normality assumptions (Mardia, 1980). If data are non-normal, maximum likelihood with robust standard errors for non-normality (MLR) will be utilized (Yuan et al., 2004). Little’s missing data test will be employed to determine if the pattern of missing data are at random or completely at random (Little, 1988). In the latter case, one of the three recommended approaches will be utilized to handle missing data: (a) full information maximum likelihood (FIML), (b) multiple imputation, or (c) listwise deletion if missing data are minimal (<3%) (Buhi et al., 2008).

To evaluate *hypothesis 1*, a linear regression will be conducted determine if experiences with overt racism are associated with the behavioral drive for muscularity in young, Asian American men. A linear regression will also be used to evaluate *hypothesis 2*, to determine if experiences with microaggressions are significantly and positively associated with the behavioral drive for muscularity in young, Asian/Asian American men. Linear regression statistics will be obtained and reported, and figures will be created using ggplot2 to visually depict the findings.

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