

Exploring Motivation for Physical Activity Across Kinesiology Students of Various Ethnicities

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Abstract

Purpose: Physical activity levels have been reported to vary across different ethnicities (NCHS, 2017). People from all backgrounds may have different motivations to perform physical activity (PA), which may be influenced by their cultural background (Langøien et al., 2017). This study explored the motivation for PA across several different ethnic groups (Hispanic, Caucasian, Asian, & Pacific Islander) and as well as their PA and resistance training (RT) levels. **Methods:** Participants consisted of a convenience sample of 113 undergraduate kinesiology students (Hispanic: $n=36$, Caucasian: $n=27$, Asian: $n=31$, Pacific Islander: $n=6$). Other ethnicities were excluded from the analysis due to too small group sizes ($n=13$). Students completed a cross-sectional survey that asked about PA participation which included the Godin Leisure Time Exercise Questionnaire (Godin & Shepard, 1985) and RT questions (3 items created for this study). Motivation was assessed using the Behavioural Regulation in Exercise Questionnaire (BREQ-3; Mullan, Markland & Ingledew, 1997) that classifies motivation into amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic regulation. One-way ANOVAs were used to compare differences between ethnicities. **Results:** External regulation motivation varied across ethnicities ($F(3, 96)=2.739$, $p=.048$; $R^2=7.9\%$). Asian students reported greater levels of external regulation than Hispanic students. Amotivation, introjected regulation, identified regulation, integrated regulation, and intrinsic regulation motivations did not show any significant differences ($p>.05$). There were no differences between ethnicities on resistance training ($p=0.478$) or PA ($p=0.503$). **Conclusion:** The lack of differences in PA and RT by ethnicity may due to the active sample of kinesiology students. However, motivations did vary by ethnicity as Asian students were more motivated by external pressures such as rewards or punishments (External regulation) than Hispanic students. This may be related to the prioritizing of collectivism within the family and respecting elders in Asian culture (Kim, Yang, Atkinson, Wolf, & Hong, 2001).

Introduction

- The majority of people are not sufficiently physically active to gain health benefits (Troiano et al., 2008)
- Physical activity levels have been reported to vary across different ethnicities (NCHS, 2017)
 - People from all backgrounds may have different motivations to perform physical activity (PA), which may be influenced by their cultural background (Langøien et al., 2017)
- Self-determination theory (Ryan & Deci, 2000) has been used frequently to describe motivation for physical activity (Teixeira et al., 2012)
- Self-determination theory characterizes motivation for specific behaviors based on different qualities or types of motivation (Ryan & Deci, 2000):
 - Amotivation:** a lack of intention to perform the behavior
 - External regulation:** performing a behavior to obtain rewards or avoid punishments (e.g., social approval/disapproval)
 - Introjected regulation:** performing behavior for internalized rewards/punishments (e.g., out of guilt)
 - Identified regulation:** performing a behavior because one identifies with the personal importance of the behavior (e.g., health)
 - Integrated regulation:** performing a behavior as it is congruent with one's identity and part of one's sense of self
 - Intrinsic regulation:** behavior is performed for the inherent enjoyment and satisfaction
- Among kinesiology students, intrinsic and extrinsic motivation has been shown to have a significant relationships with exercise (Stucchi, Hannoush, Andrews, & Fitts, 2014)

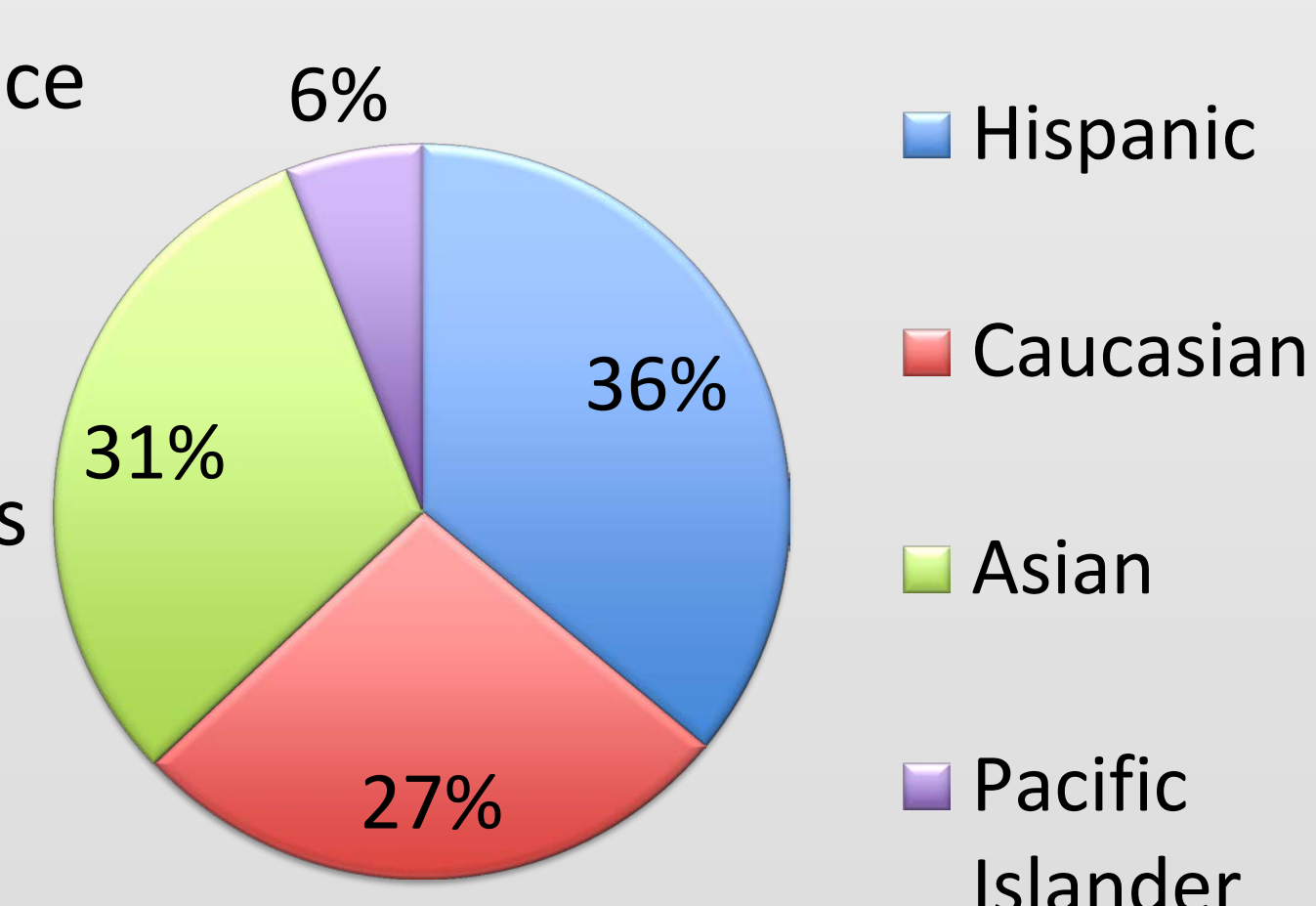
Purpose

Explored the motivation for PA across several different ethnic groups (Hispanic, Caucasian, Asian, & Pacific Islander) and as well as their PA and resistance training (RT) levels

Methods

Participants

- Participants consisted of a convenience sample of 113 kinesiology students
- Ethnicity:** Excluded 13 students from ethnic groups that had too small sample size for comparisons
- Age:** 18-35 years ($M=22.0$, $SD=2.6$)



Procedures

- Midway through the Fall 2016 and Spring 2017 semesters, participants completed a questionnaire during class time
- The cross-sectional survey asked about PA participation

Measures

- PA participation was measured by the Godin Leisure Time Exercise Questionnaire (Godin & Shepard, 1985)
 - Frequency of strenuous, moderate & mild activity
 - Converted to activity score weighted by MET value of activities
- RT participation was measured with three questions that asked how often they engaged in RT
 - Frequency of body weight, free weights, machines
- Motivation was measured by the Behavioural Regulation in Exercise Questionnaire (BREQ-3; Mullan, Markland & Ingledew, 1997)(24 items)
 - 4 items for each subscale
 - Not True of Me (0) to Very True of Me (4)

Analysis

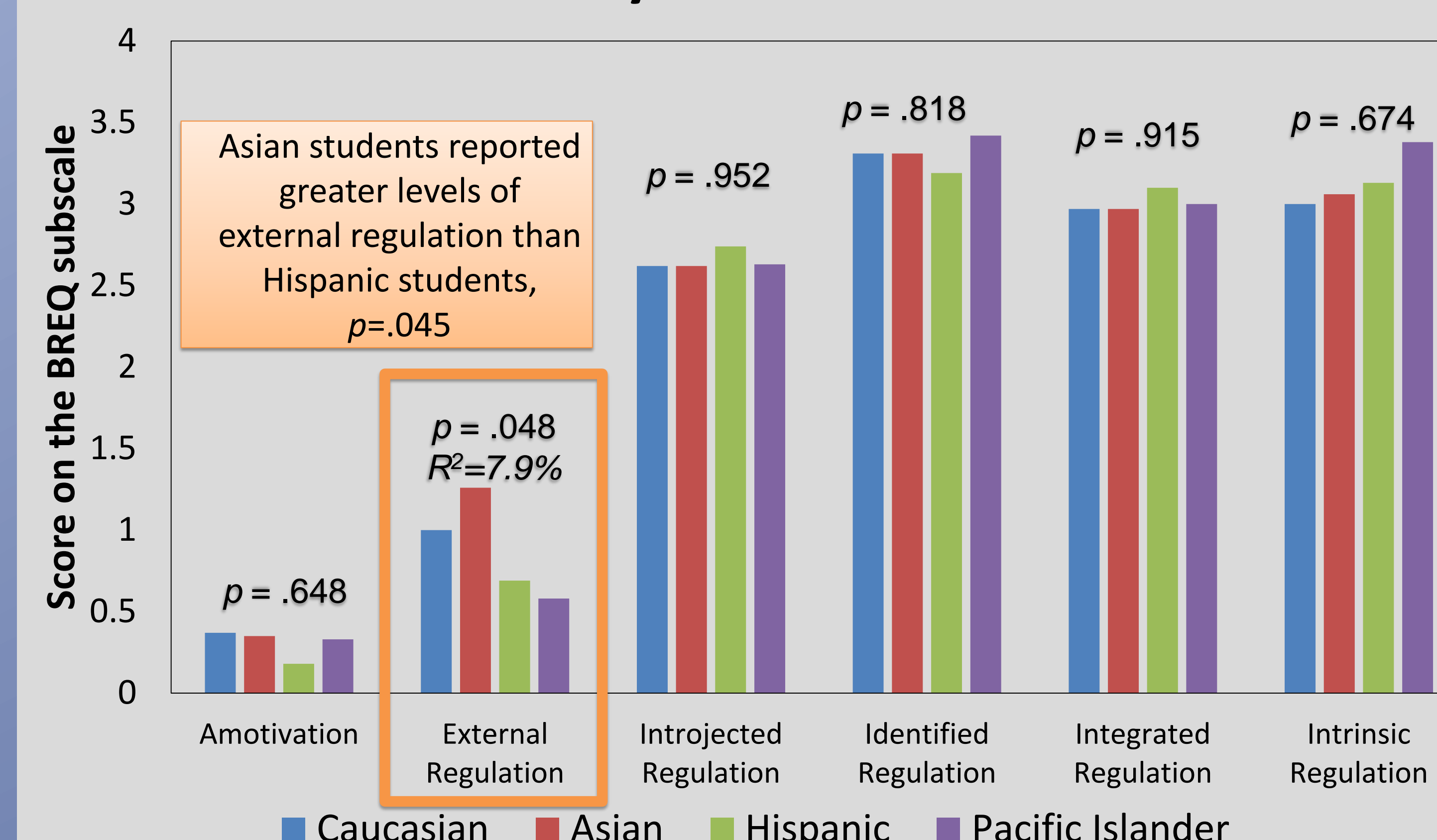
- Separate One-Way ANOVA's were conducted for each motivation type and activity type
- IV: Ethnicity: Caucasian, Asian, Hispanic, Pacific Islander
- Tukey HSD was used for post hoc analysis

Discussion

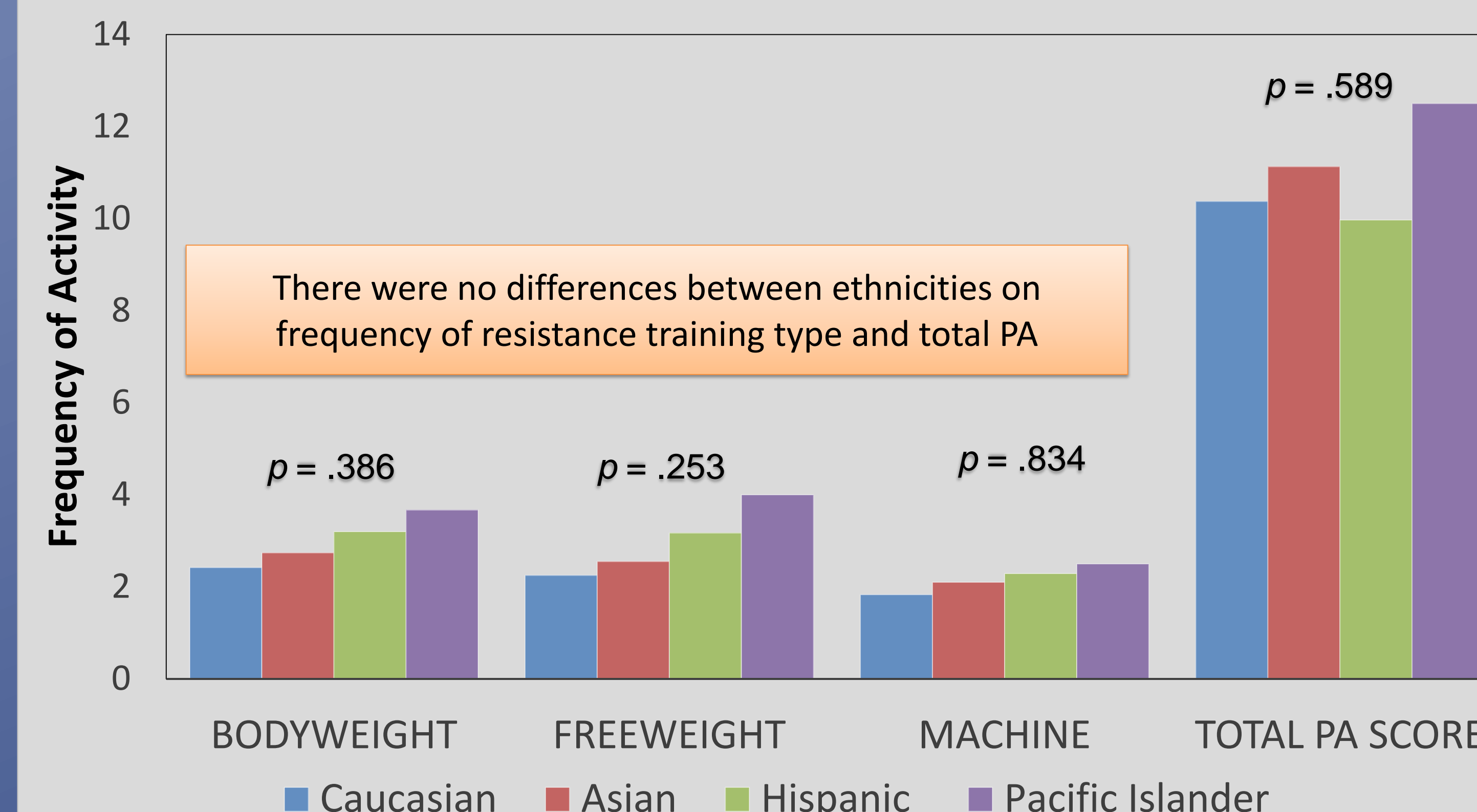
- All students reported high levels of motivation including identified, integrated and intrinsic regulation and physical activity
 - All students were kinesiology and may have been highly motivated
 - In psychology students, means seemed to be lower ranging from 2.59 – 2.76 for identified and intrinsic regulation (Wilson et al., 2004)
 - Possible ceiling effect limited ability to detect differences
- External regulation varied by ethnicity as Asian students were more motivated by external pressures such as rewards or punishments than Hispanic students
- Asian culture prioritizes of collectivism within the family and respecting elders in Asian culture (Kim, Yang, Atkinson, Wolf, & Hong, 2001)

Results

Ethnicity and Motivation



Physical Activity & Resistance Training Participation



Limitations

- All participants who were surveyed were from Kinesiology department
 - Limited generalizability as this was a convenience sample that may not be representative as participants showed high levels of motivation
- Low sample for Pacific Islander group ($n=6$) may have limited the ability to detect differences with that group
- Self-reported physical activity measures may include bias in reporting of PA levels and resistance training questions developed for this study

Future Directions

- Repeat with more representative sample (non-Kinesiology)
- Disaggregate different Asian or Hispanic cultures may provide more insight into the nuances of culture