

# Acculturation Patterns in Childhood/Adolescence and Psychological Stress in Emerging Adulthood Among Puerto Rican Youth, and the Moderating Role of Race and Skin Tone

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Dissertation Proposal Presentation

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# Overview

- Introduction
- Latinx Acculturation
- Dissertation Project Objectives
- Methods: Participants, Procedures, Measures
- Research Questions, Hypotheses, and Analysis Plan

# Introduction

- Acculturation – the process of integrating two or more distinct cultures – can be a challenging process that yields psychological stress, and has been linked to negative mental health consequences in adults (Berry, 2006) and more recently among adolescents (Berry, 2006; Schwartz et al., 2015).
- This pattern may be related to psychological stress resulting from greater orientation to US (Anglo) culture over time (Schwartz et al., 2015).
- The United States (US) is projected to become a multicultural-majority country (based on ethnic and racial composition) by the year 2050, with Latinx children and adolescents (i.e., youth) projected to drive US population growth (Vespa et al., 2020).
- Examining acculturation experiences is important for understanding the health of future generations.

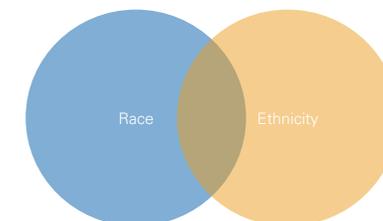
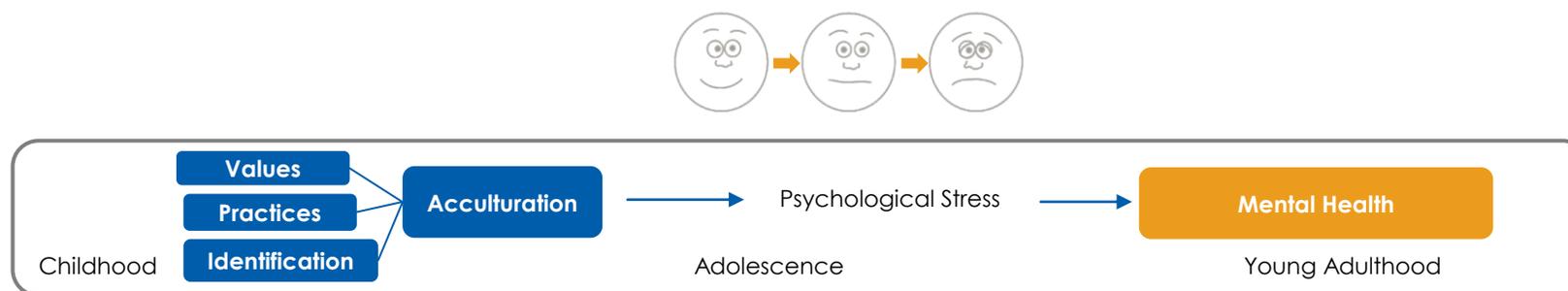


# Introduction

- Other research indicates that integrating both US and Latinx cultures (i.e. biculturalism- which is the most common acculturation pattern) is related to favorable mental health outcomes (Berry, 2017; Cruz et al., 2017), while some have found no association between acculturation and psychological outcomes (Gonzales-Backen et al., 2017).

## Acculturation Research Limitations:

- Lack of multidimensional approach- single indicators → cultural values, practices, and identification (Schwartz et al., 2010).
- Cross-sectional studies [one point in time] or examined during adolescence or adulthood [one developmental period].
- Not considering the role of intersectionality in the acculturation process [e.g., combination of social factors – ethnicity and race (Torres et al., 2018, Viruell-Fuentes, 2012)].



# Latinx Acculturation- Multidimensional

- Cruz and colleagues (2017) examined cultural values, practices, and identification and substance use among a Mexican-American adolescents and found that high and increasing Latinx cultural values and moderate and increasing bilingualism was linked to lower risk for substance use, but ethnic pride was not related.

	<u>Latinx</u>	<u>Anglo</u>	<u>Substance Use</u>
Values	High, Increase	x	Lower Risk
Practices	Mod, Increase	Mod, Increase	Lower Risk
Identification	x	x	Not related

- Participants who remained stable in practices, values, and identification reported more depressive symptoms, while those who increase in the practices and values, but were stable in identification reported the least depressive symptoms (Schwartz, 2015).

Each dimension gives you different information and relationships

# Latinx Acculturation- Developmental

- Unger and colleagues (2014) examined cultural practices and identification and substance use among Latinx youth (84% Mexican-American). Researchers found that high Latinx cultural practices in adolescence was linked to lower cigarette, alcohol, and marijuana use in emerging adulthood, but no association was found for ethnic identification.

	<u>Latinx</u>	<u>Anglo</u>	<u>Substance Use</u>
<b>Values</b>	not measured	not measured	-
<b>Practices</b>	Increase	x	Lower substance use
<b>Identification</b>	x	x	Not related

[ADOLESCENCE]

[YOUNG ADULTHOOD]

- Schwartz and Zamboanga (2008) examined acculturation patterns among Latinx college students in Miami, Florida and found several integration (bicultural) groups, an assimilated (Anglo) and separated (Latinx) group, and undifferentiated (marginalization (neither)-\*which is largely underrepresented in adolescent samples).

Early experiences can affect later outcomes, changes occur by emerging adulthood

# Latinx Acculturation- Intersectionality [Ethnicity and Race]

- Darker skinned Latinx people often experience discrimination like African/Black-Americans, are rendered invisible in acculturation studies, and questioned about their identities, while White/European-Latinx or lighter skinned Latinx people are allowed to express and embrace their *latinidad* without question (Adames et al., 2021).



- Unger et al. (2014) reported that individuals reporting higher levels of discrimination reported higher substance use, suggesting that individuals not accepted by mainstream population may experience more negative mental health outcomes, when compared to those that don't experience discrimination.

Experiences vary based on the intersections of different social factors and Latinx group being examined

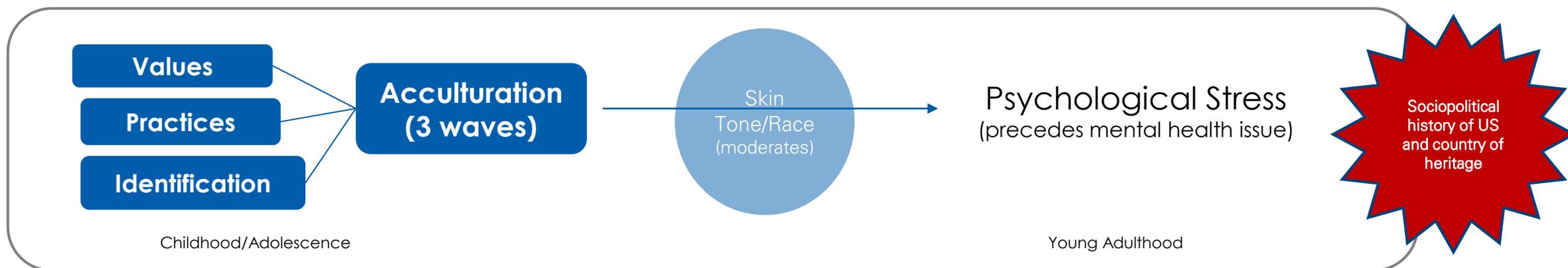
# Latinx Acculturation- Puerto Ricans

- Differences in prevalence of mental illness by Latinx subgroup and immigrant/non-immigrant status have been observed among adults, with Puerto Ricans experiencing the least favorable mental health outcomes (Alegría et al., 2008).
- The longstanding colonial rule of the US over Puerto Rico could be implicated in the negative mental health outcomes among Puerto Ricans.
- Research assessing multidimensional acculturation and its relation to these mental health outcomes among Puerto Ricans is limited. Capielo Rosario and Dillon (2019) found 3 classes among youth from Miami, that suggests
  - The partial marginalization (neither) group reported the highest level of acculturative stress and depressive symptoms.
  - Followed by the bicultural (both) group who reported modest acculturative stress and higher depressive symptoms
  - The partial separation (Latinx) group had the lowest acculturative stress and depressive symptoms.
- Duarte and colleagues (2008) found that acculturation across 3 timepoints (using average scores) in childhood was not related to psychiatric symptoms (antisocial behavior and internalizing symptoms) among Puerto Rican youth in the US and Puerto Rico. However, higher cultural stress was related to psychiatric symptoms in both sites.

# Dissertation Project Objectives

Secondary data analysis of longitudinal data from the Boricua Youth Study to examine

- (1) Multidimensional acculturation patterns in practices, values, and identification among Puerto Rican youth in late childhood/early adolescence.
- (2) Acculturation pattern changes or stability over a three-year period.
- (3) If these acculturation patterns and its changes are associated with psychological stress (cultural and perceived) in emerging adulthood, and how Skin Tone/Race moderates this relationship.

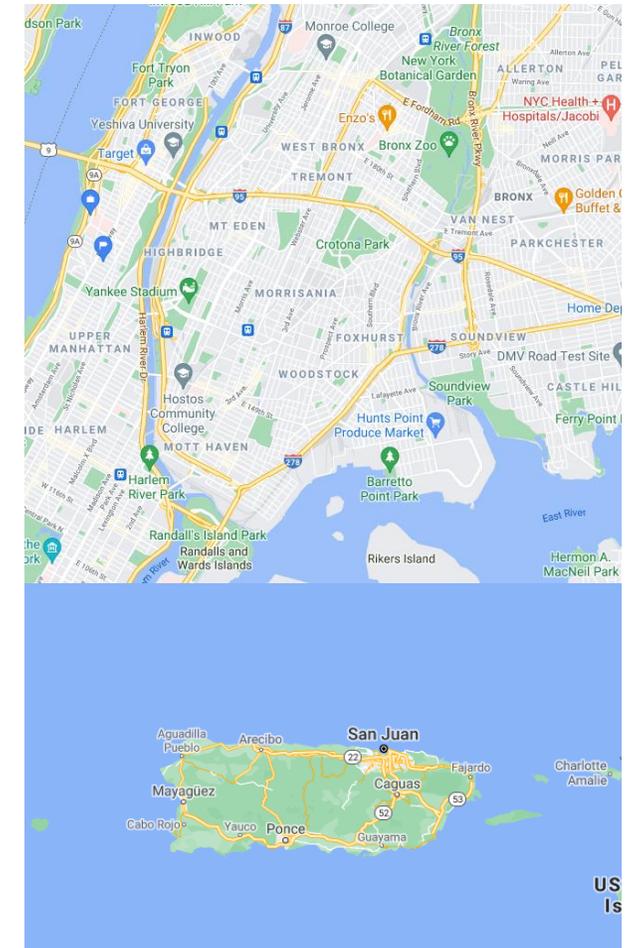


# Methods- Participants

- Participants for this project are drawn from the **Boricua Youth Study (BYS)**, which is an ongoing longitudinal study investigating the relationship between context and mental health outcomes in a community sample of Puerto Ricans living in the South Bronx, New York City, or San Juan, Puerto Rico when first recruited.
- A household was eligible to participate if at baseline the following three criteria were met:
  - (a) a parent or primary caretaker and at least one child between the ages of 5-13 years old identified as being Puerto Rican.
  - (b) the child(ren) had been living in the household for at least 9 months.
  - (c) the child(ren) had no known developmental disability. Up to three eligible children from each household were selected to participate at random.
- At baseline, a total of 2,491 youth participated in the BYS.
- Four waves of parent and youth data were collected, but for this study we are only using youth data. The first three waves from 2000 to 2004 and the fourth wave from 2013 to 2017.

# Methods- Procedures

- Children and adolescents were first recruited from two communities: one in the South Bronx in New York City and the second in San Juan in Puerto Rico.
- Metropolitan areas were randomly selected, and recruiters surveyed household units in search of eligible participants using a recruitment form.
- Participants were scheduled for interviews in their home or location of preference and were contacted each wave to ask if they were interested in participating in subsequent waves.
- The interviews for all waves were administered through laptops using a computerized program called Dialogix (White & Huan, 2001).
- Participants were given the option of choosing which language they were most comfortable with, English or Spanish, and were able to switch languages throughout the interview.
- Participants also had the option of refusing to answer questions or sections of the interview or saying, “don’t know” for any or all questions throughout the entire interview.
- At the end of the interview, children and adolescents (and parents that requested) were given a resource guide with information of various children and family, legal, alcohol and substance, and educational services offered in New York City.



# Methods- Measures

## Acculturation

(Wave 1, 2 and 3)

### Cultural Life Style Inventory (CLSI)

5-item adaptation (Mendoza, 1989):

Language orientation (Latinx, Anglo, Bicultural)

- youth prefer to speak
- Speak better
- Read or are read to in
- Watch television
- Which culture they feel proudest

### Familism scale

4-item adaptation (Sabogal et al., 1987)

Agreed or disagree with statements:

- children should always try to please their parents
- parents should live with their children when they are old
- a family should share their house with relatives
- A person should feel bad when their siblings do bad things

## Psychological Stress

(Wave 4)

### Cultural Stress- Hispanic Stress Inventory

10-item adaptation (R. C. Cervantes et al., 1991)

Never, rarely, sometimes, or often experienced stress because of feelings of rejection, problems with making friends because of language being treated badly and family problems, and four items assessed intercultural conflicts because of being Puerto Rican/Latinx.

### Perceived Stress Scale

14-item scale measuring the degree to which situations in the last month were stressful.

## Race and Skin Tone

(Wave 4)

### Skin Tone

Participants were asked to respond to questions about how they and others would classify their skin tone on a scale from 1 to 10, with 1 being very light/white and 10 being very dark/black

### Race

Participants were asked the name of the racial group that best describes them:

- [1] American Indian/Alaska Native
- [2] Asian
- [3] Native Hawaiian or Other Pacific Islander
- [4] Black or African American
- [5] White or Caucasian
- [6] More than One Race
- [7] Other (Specify)

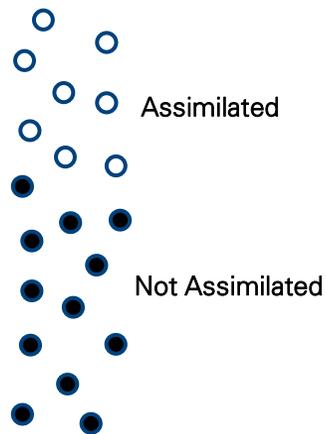
# Research Question, Hypothesis, and Analysis Plan: Part 1

Longitudinal data from the Boricua Youth Study to examine (1) **multidimensional acculturation patterns in practices, values, and identification among Puerto Rican youth in late childhood/early adolescence**, (2) acculturation pattern changes or stability over a three-year period, (3) if acculturation patterns are associated with psychological stress in emerging adulthood, and how Skin Tone/Race moderates this relationship.

- **Research Question 1**  
What multidimensional acculturation patterns emerge during childhood/adolescence among Puerto Rican youth in the US and Puerto Rico?
- **Hypothesis 1**  
Biculturalism will be represented to some degree in the most common latent classes but no prior assumptions about the composition of acculturation patterns are made. Based on prior research, we expect similar patterns in the US and Puerto Rico.
- **Analysis Plan 1**  
A latent class analysis (LCA) will be conducted using Mplus, including the 5 items of the cultural life style inventory and familism scales for waves 1, 2, and 3. The LCA will be performed for the overall sample and then stratified by site and age.

# Latent Class Analysis

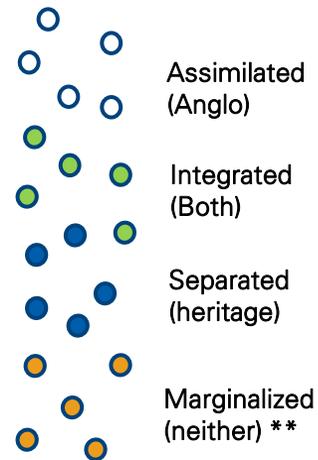
## Unidimensional



Roots in Anthropology-  
Assimilation of Native  
Americans and new  
Immigrants

Not assimilated associated  
with worse outcomes

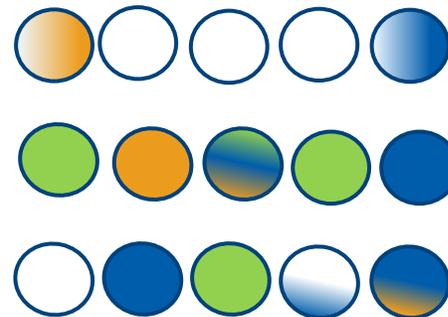
## Bidimensional [Four-Fold]



Berry's Four-Fold  
Model- include both  
cultures

Marginalized associated  
with worse outcomes

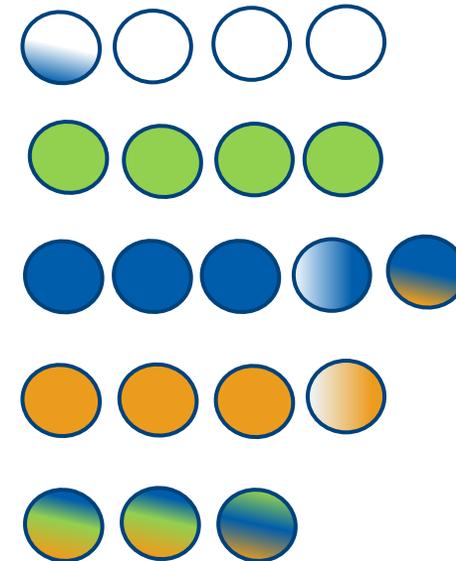
## Multidimensional Separated



Practices [group] –both cultures  
Values [group]- both cultures  
Identification [group]- both cultures

In general biculturalism associated with better  
outcomes, but relationship vary by dimension

## Multidimensional Combined



Practices, Values, and Identification-  
both cultures, tricultural (emerging)



## Research Question, Hypothesis, and Analysis Plan: Part 2 \*

Longitudinal data from the Boricua Youth Study to examine (1) multidimensional acculturation patterns in practices, values, and identification among Puerto Rican youth in late childhood/early adolescence, (2) **acculturation pattern changes or stability over a three-year period**, (3) if acculturation patterns are associated with psychological stress in emerging adulthood, and how Skin Tone/Race moderates this relationship.

- Research Question 2  
How do multidimensional acculturation patterns during childhood/adolescence among Puerto Rican youth in the US and Puerto Rico change over period of three years?
- Hypothesis 2  
Patterns will remain relatively stable, and if there are some changes it will be in language practices. Changes in patterns may differ by site.
- Analysis Plan 2  
Participants will be assigned an acculturation trajectory based on their class memberships at wave 1,2,and 3. Participants that remain stable will be labeled as “stable” and those who change will be labeled as based on the direction of change by dimension (e.g. increasing bicultural practices, decreased Anglo identification). A latent transition analysis will be conducted using the class membership from the first three waves to examine stability and change prevalence within the sample.

# Latent Transition Analysis

	Class 1	Class 2	Class 3
Class 1	.61 .64	.18 .15	.08 .15
Class 2	.01 .04	.57 .53	.16 .19
Class 3	.05 .04	.04 .05	.68 .66

Blue: Time 1 to Time 2  
Green: Time 2 to Time 3  
Squares: Stable  
No Square: Change

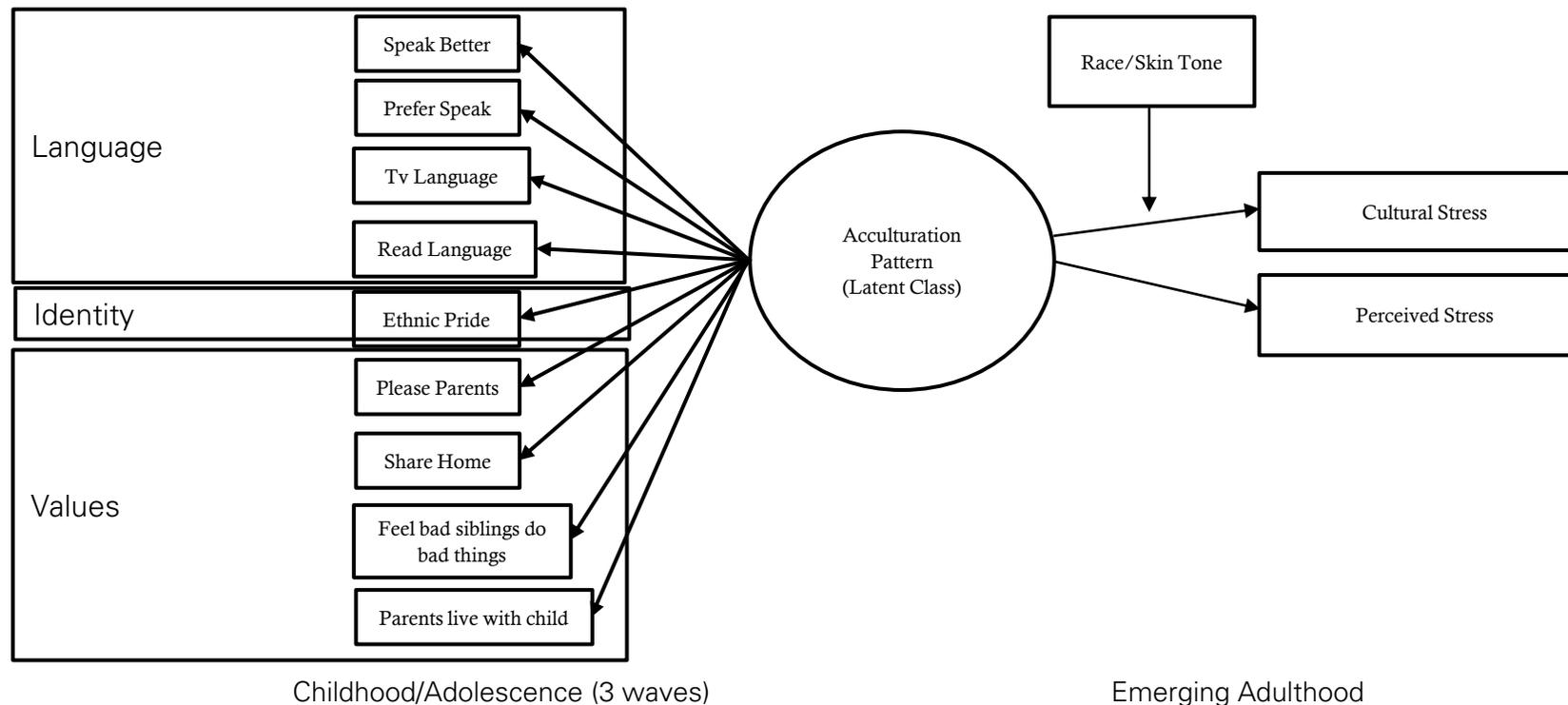
## Research Question, Hypothesis, and Analysis Plan: Part 3

Longitudinal data from the Boricua Youth Study to examine (1) multidimensional acculturation patterns in practices, values, and identification among Puerto Rican youth in late childhood/early adolescence, (2) acculturation pattern changes or stability over a three-year period, **(3) if acculturation patterns are associated with psychological stress in emerging adulthood, and how Skin Tone/Race moderates this relationship.**

- [Research Question 3](#)  
How are changes in multidimensional acculturation patterns during childhood/adolescence related to psychological stress in emerging adulthood among Puerto Rican youth in the US and Puerto Rico?
- [Hypothesis 3](#)  
Patterns exhibiting high bicultural (and increasing bicultural) practices, high Latinx or bicultural (and increasing Latinx) identification, and high or stable (and increasing Latinx) values will be related to less psychological stress in emerging adulthood.
- [Research Question 4](#)  
How does skin tone or race moderate the relationship between childhood/adolescence patterns in childhood and psychological stress in emerging adulthood among Puerto Rican youth in the US and Puerto Rico?
- [Hypothesis 4](#)  
Skin tone will moderate this relationship, with individuals reporting darker skin displaying more psychological stress. Moderating effects may differ by site.
- [Analysis Plan 3](#)  
Regression models, with Cultural Stress and Perceived Stress as the dependent variables and the Acculturation Trajectory as independent variable. These models will be adjusted by site and age if the overall latent class model is used. Interactions with Skin Tone/Race will be tested.

# Model

Secondary data analysis of longitudinal data from the Boricua Youth Study to examine (1) multidimensional acculturation patterns in practices, values, and identification and its changes among Puerto Rican youth in late childhood/early adolescence, (2) examining if these patterns are associated with psychological stress in emerging adulthood, (3) and how Skin Tone/Race moderates this relationship.



Thank You!

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