



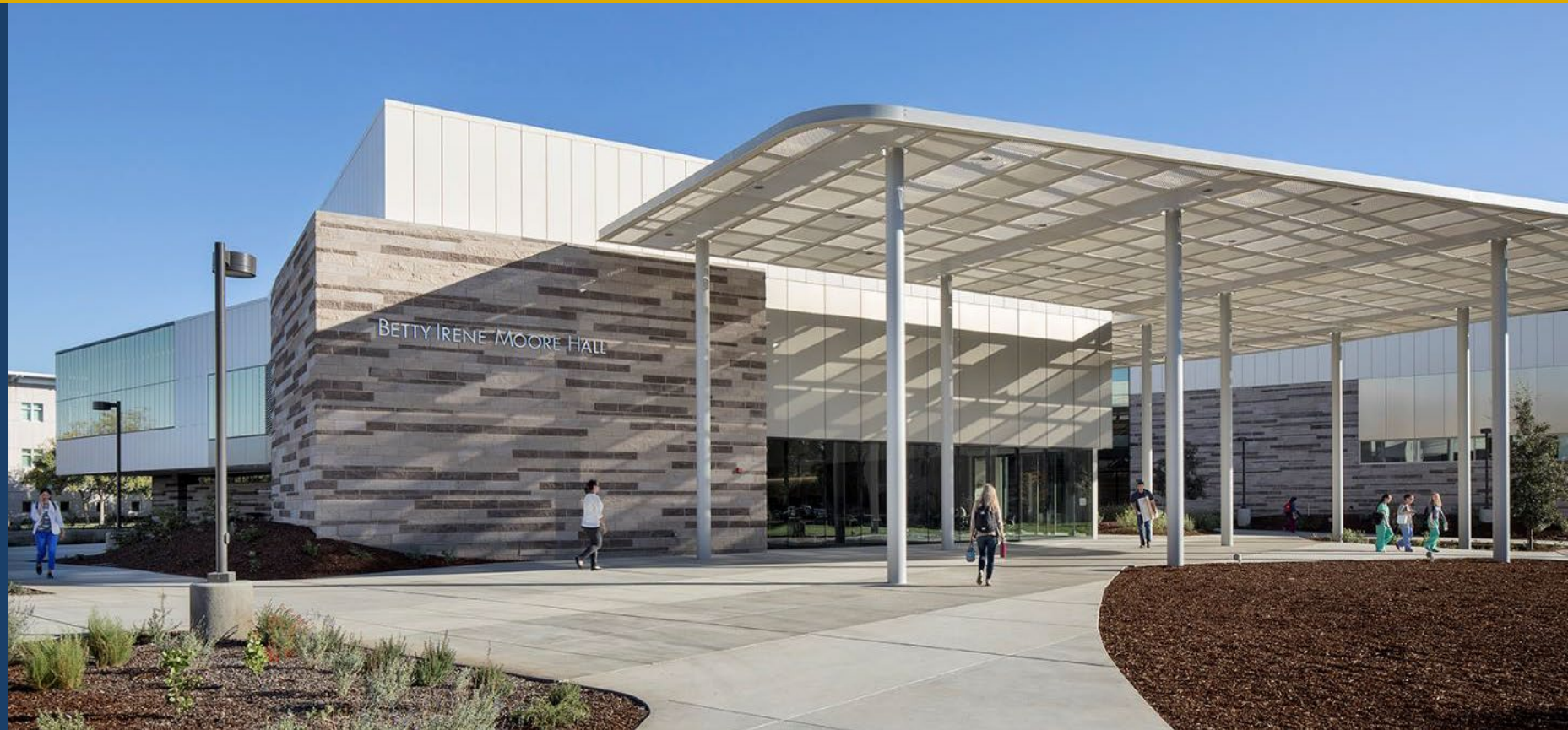
# Associations between Material Hardship, Acculturation, and Emotional Health in Socioeconomically Disadvantaged Latinx Children and their Mothers

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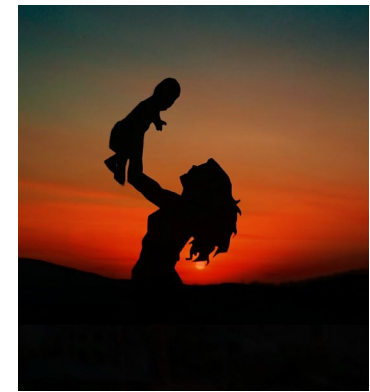


# Definition of Terms

Material hardship	Acculturation	Biomarker
Difficulty in meeting basic needs for safe and healthy living	Cultural modification of an individual or group by adapting to traits from another culture, often as a result of displacement or immigration	Distinctive biological or biologically derived indicator of a process or condition
Housing, food, or job insecurity	Language preference	Cortisol as a measure of stress

# Summary of the Science

- Child emotional dysfunction impacts child and adult health outcomes
- Maternal stress & material hardship impact child emotional health
- Low-income Latinx mothers are at high risk for stress and material hardship
- Low acculturation may represent cultural protective factors against stress in Latinx populations
- Stigma around mental health or social needs may impact research participation or survey findings
- Limited research on biomarkers of physiologic stress in Latinx populations in relation to material hardship

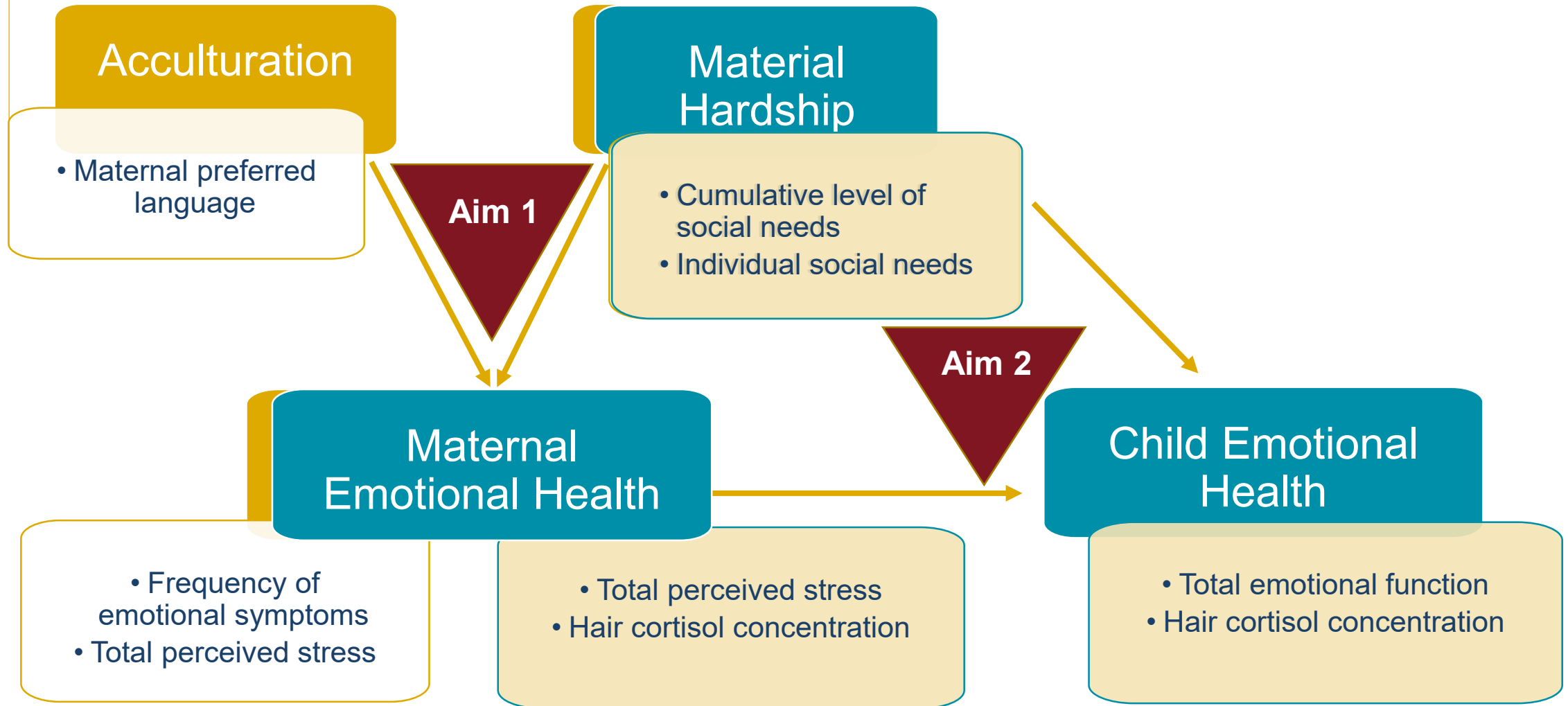


# Study Design



- Quantitative secondary analysis of cross-sectional enrollment data
  - 6mo longitudinal RCT of a social services navigation program
  - Survey/biomarker measures from 600+ caregiver-child pairs

# Study Aims



# AIM 1: Test associations between material hardship, acculturation, and maternal emotional health



- Methods
  - Descriptive statistics
  - Chi-square comparisons
  - Multinomial logistic regression



# AIM 1 Results: Descriptive Characteristics

	All	English	Spanish	<i>p</i>
	(n=455)	(n=64)	(n=391)	
Maternal Emotional Symptoms				
Never/Rarely	166 (36.48)	12 (18.75)	154 (39.39)	<0.01
Sometimes	188 (41.32)	31 (48.44)	157 (40.15)	
Often/Always	101 (22.20)	21 (32.81)	80 (20.46)	
Maternal Perceived Stress Score				
0 to 4	172 (37.80)	17 (26.56)	155 (39.64)	0.12
5 to 8	139 (30.55)	24 (37.50)	115 (29.41)	
9 to 20	144 (31.65)	23 (35.94)	121 (30.95)	
Household Level of Social Need				
None	42 (9.23)	5 (7.81)	37 (9.46)	0.79
1-3 needs	190 (41.76)	29 (45.31)	161 (41.18)	
4+ needs	223 (49.01)	30 (46.88)	193 (49.36)	

# AIM 1 Results: Cumulative Household Needs



## **4+ social needs**

- 15 times HIGHER risk for frequent emotional symptoms ( $p < 0.01$ )
- 5 times HIGHER risk for high perceived stress ( $p < 0.01$ )



## **Lower acculturation**

- 79% LOWER risk for frequent emotional symptoms ( $p < 0.01$ )
- not associated with perceived stress



# AIM 1 Results: Individual Social Needs



Paying Bills



Housing



Habitability

\*Risk for frequent emotional symptoms and high perceived stress twice as high for each of these needs ( $p < 0.05$ )\*



Food



Finding Job



Transportation

\*Lower acculturation predicted lower risk for frequent emotional symptoms ( $p < 0.01$ ), but NOT perceived stress, across all models\*

## AIM 2: Test associations between **material hardship, maternal stress, and child emotional function or stress**



- Methods
  - Descriptive statistics
  - Binomial logistic regression: child emotional function
  - Multinomial logistic regression: child hair cortisol

# AIM 2 Results: Descriptive Characteristics

Dependent and Independent Variables	n (%)
<b>Child Emotional Function Score</b>	
High Function	256 (59.26)
Low Function (<64)	176 (40.74)
<b>Child Hair Cortisol Level</b>	
Highest Tertile ( $\geq 37.39$ pg/mg)	104 (33.33)
<b>Maternal Perceived Stress Score</b>	
Low Stress	165 (38.19)
Moderate Stress	131 (30.32)
High Stress ( $\geq 8$ )	136 (31.48)
<b>Maternal Hair Cortisol Level</b>	
Highest Tertile ( $\geq 7.41$ pg/mg)	144 (33.33)
<b>Household Level of Social Needs</b>	
None	42 (9.72)
1-2	114 (26.39)
3-4	113 (26.16)
5 or more	163 (37.73)

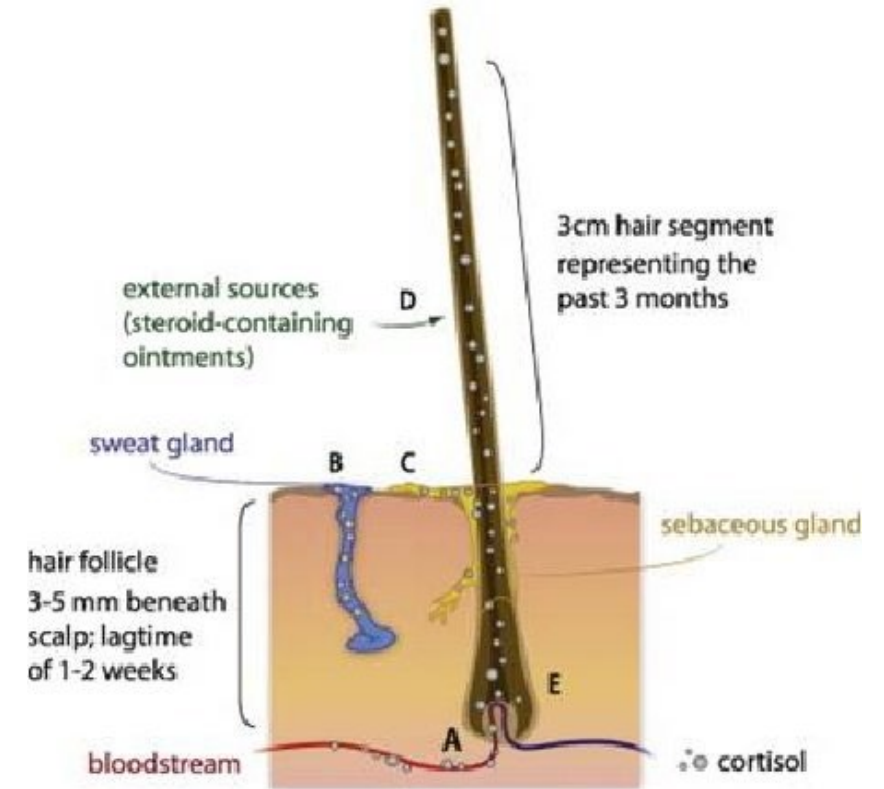
## AIM 2 Results: Child Emotional Dysfunction

Mothers who have moderate or high levels of perceived stress have **twice** the odds of reporting child emotional dysfunction ( $p < 0.05$ )

Mothers who report a household need of finding after school activities for their children, have **twice** the odds of reporting child emotional dysfunction ( $p < 0.05$ )

# AIM 2 Results: Child Hair Cortisol

- Subsample (n = 312)
- Mothers with high hair cortisol concentrations had over **10 times HIGHER** risk of having a child with high hair cortisol concentration.
- Neither cumulative nor individual social needs predicted child hair cortisol concentration.



# Implications for Clinical Practice

- Mental health and social risk screening and surveillance
- Integrated behavioral health and social services
- Culturally-tailored interventions





# Implications for Policy

- Upstream contributors to economic hardship in Latinx population
- Improve access to social services
- Increase access to healthcare





# Implications for Research

- Differences in social needs impact on mothers' vs. children's emotional health
- Maternal stress as a mediator between material hardship and child emotional dysfunction
- Cultural contributors to emotional resilience in Latinx groups and ethnic subpopulations
- Continued study of biomarkers as measures of stress, particularly in Latinx populations



# Thank You!

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