

EARLY SOCIAL DETERMINANTS OF ADOLESCENT WELLBEING

Youth Mental Health Crisis

Access to care

Before the COVID pandemic, 20% of US youth reported a mental health disorder and only half received appropriate treatment.

Prevention during COVID

Emergency room visits for psychiatric crises have doubled during COVID
Youth have reduced access to friends, teachers and healthcare providers that can recognize early signs of mental health challenges.

Health Equity

Poor understanding of adolescents who disproportionally experience social conditions that predispose them to poor outcomes, like poverty, food insecurity and local environmental factors.

Early contributors of adolescent wellbeing

Adverse Childhood Experiences

early exposures to abuse, neglect,
family mental health problems,
substance abuse, incarceration, family
separation

A young child with long hair, wearing goggles and a striped cape, stands with hands on hips, looking upwards. The image is overlaid with a teal tint.

& Resilience

Knowledge Gaps

Our study's contribution

1

Lack of information
about prenatal social
conditions

2

Underrepresentation
of minoritized
populations

3

Single informant
report of family level
constructs

4

Limited integration of
social determinants
with proximal
predictors

A photograph of two young women looking at a smartphone together, overlaid with a semi-transparent teal filter. The woman on the left is pointing at the screen, and both are smiling. The image occupies the left half of the slide.

Aims

1. Develop a predictive model of adolescent well-being from early social and structural health determinants
2. Determine how maternal, paternal, youth and teacher report informs wellbeing

Data Source



Stratified, multistage design of 5,000 children born in 16 US cities in 2000

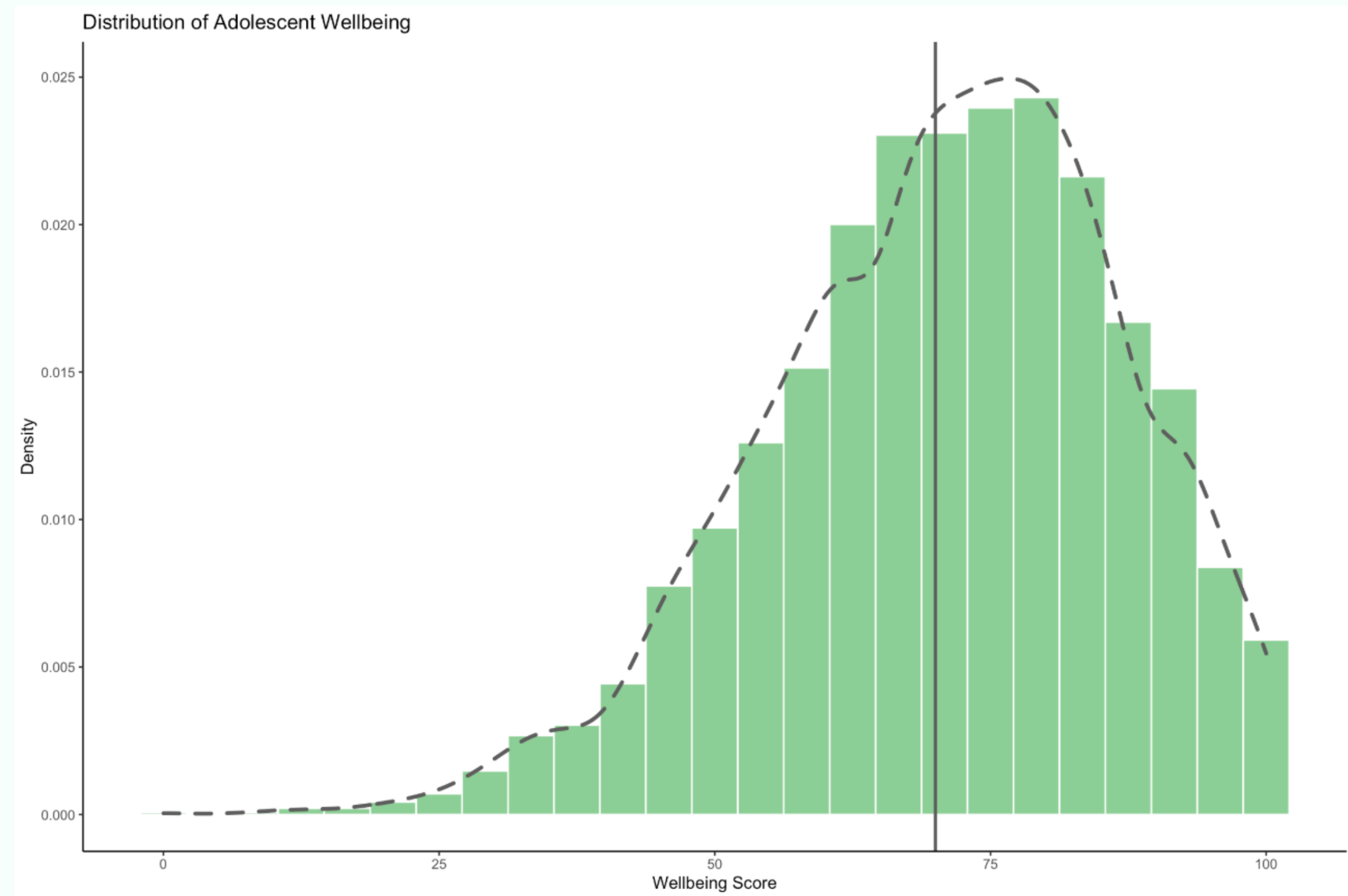
- Oversampled single parent households, racial-ethnic minority families and low-income caregivers
- Follow-up conducted at ages 1, 3, 5, 9 and 15; data collection is ongoing
- Self-report from adolescents in addition to maternal, paternal, and teacher interviews

Outcome variable

Adolescent wellbeing

12 scaled questions from the Adaptive Social Behavior Inventory and Social Skills Rating System

- I am open and direct about what I want
- I make friends easily
- I am self-confident in social situations such as parties or group outings



Early childhood development



Prosocial behavior

peer play
bullying
school engagement
sleep
technology
educational access
interpersonal violence exposure



Social determinants of health

prenatal care
neighborhood safety
community support
occupational exposures
service access
carceral history
food insecurity

Models

Linear
regression

LASSO
logistic
regression

Relaxed
LASSO
logistic
regression

Random
forest

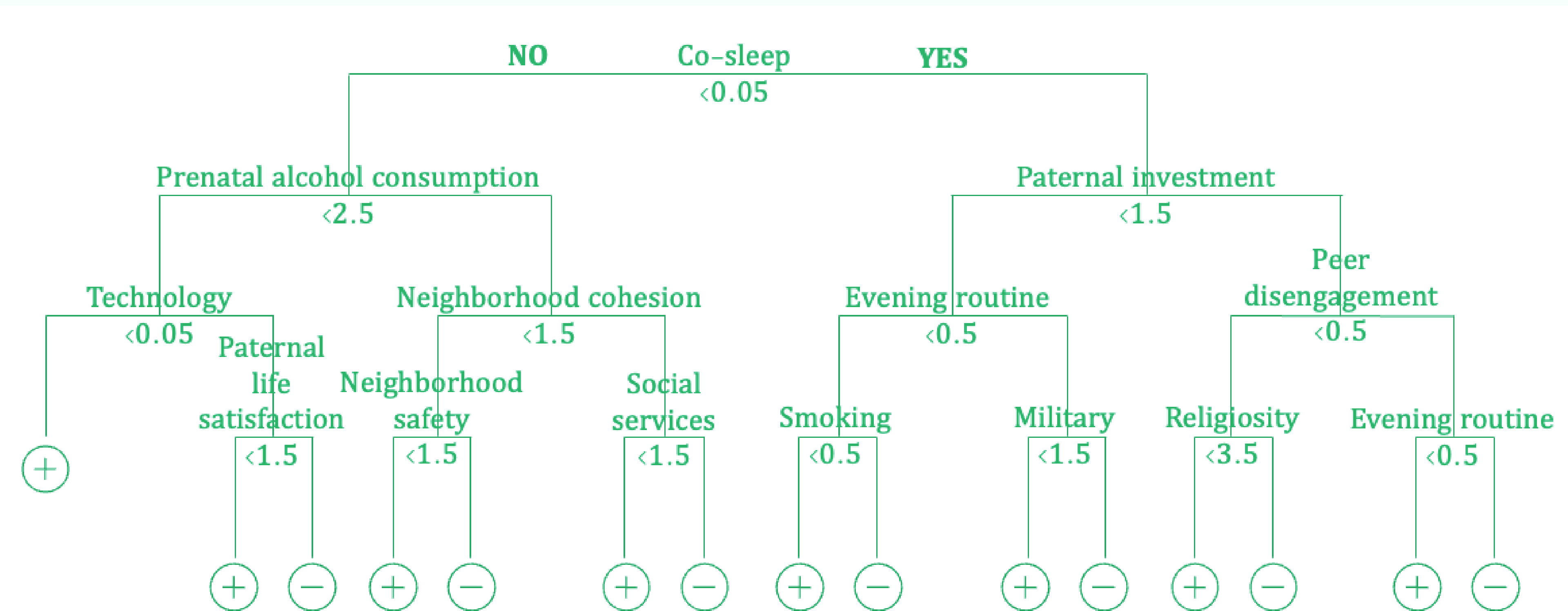
LASSO
logistic
regression
with PCA

Random
forest with
PCA

0.076
**Validation
error**

**RANDOM
FOREST**

Random Tree



Key early considerations for wellbeing

Paternal presense and health

Daily structure

Social safety and community



Implications

Advocating for youth wellbeing

Families

Social support

Daily routines

Participate in neighborhoods

Environmental exposures

Schools

Peer engagement

Facilitate community

Paternal involvement

Policy

Investments social services

Access to technology

Public health campaigns

Thank you!

