

# Impact of Psychosocial Health on Pregnancy Intention

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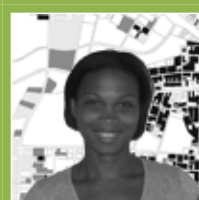
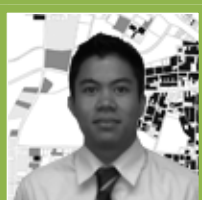
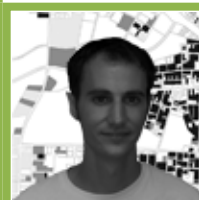
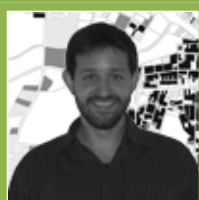


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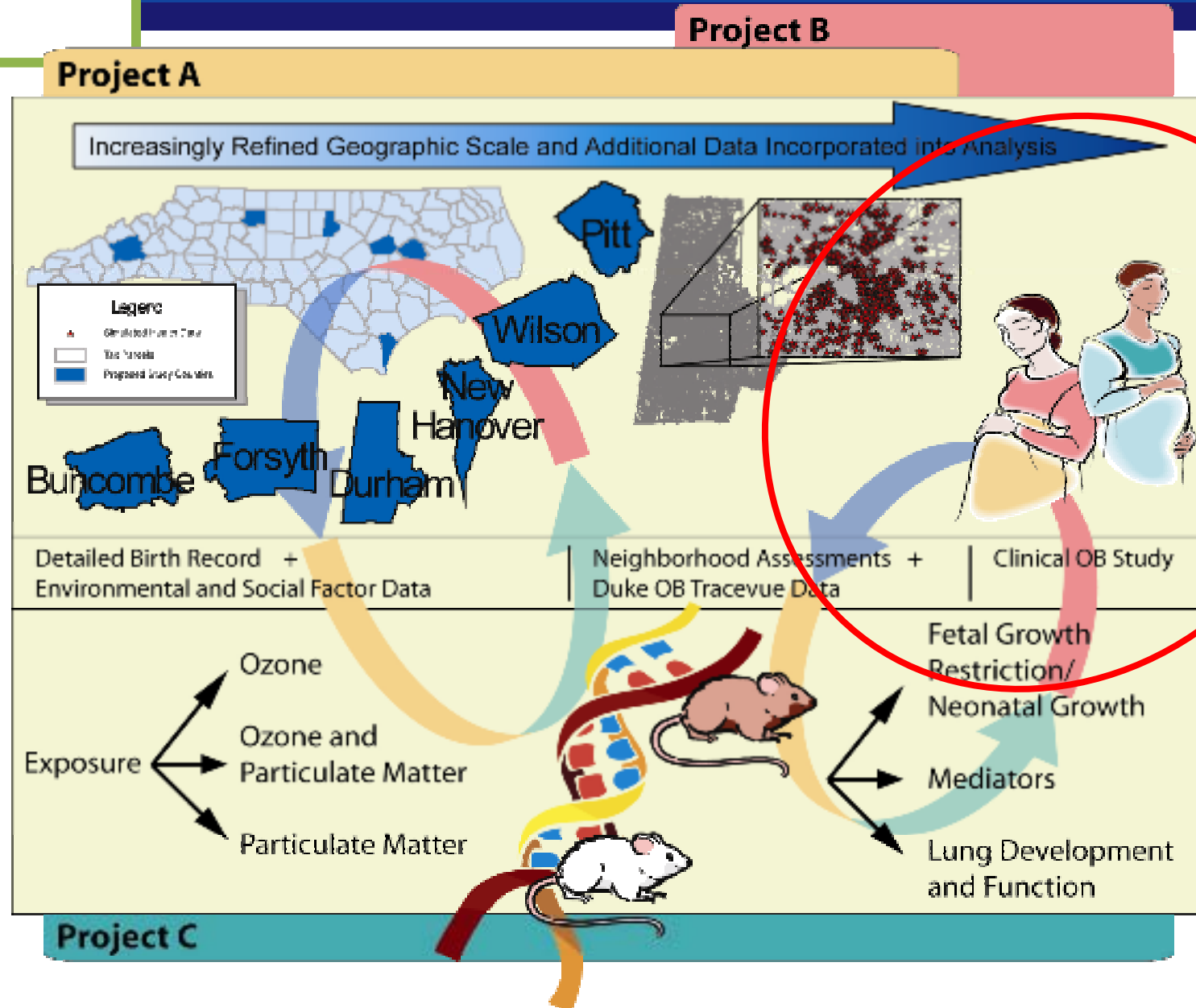


# Children's Environmental Health Initiative

A research, education, and outreach program committed to fostering environments where all children can prosper.



# Relationships among SCEDDBO Projects



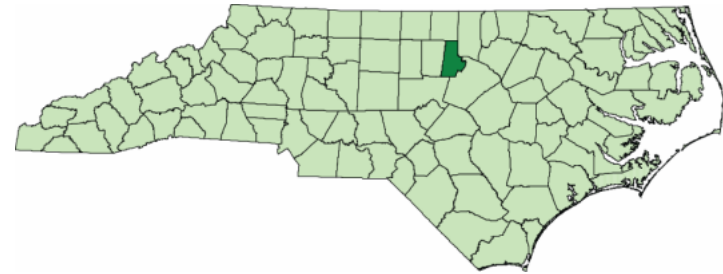


## Study Design

- Prospective cohort study of pregnant women in Durham, NC
- Psychosocial assessment through surveys
- Maternal blood draws at 28 weeks (genetics) and at birth (environmental exposures)
- Delivery samples: placental tissue, cord segment, cord blood
- Pregnancy outcomes including:
  - Birth weight
  - Gestation
  - Maternal medical complications



## Study Participants

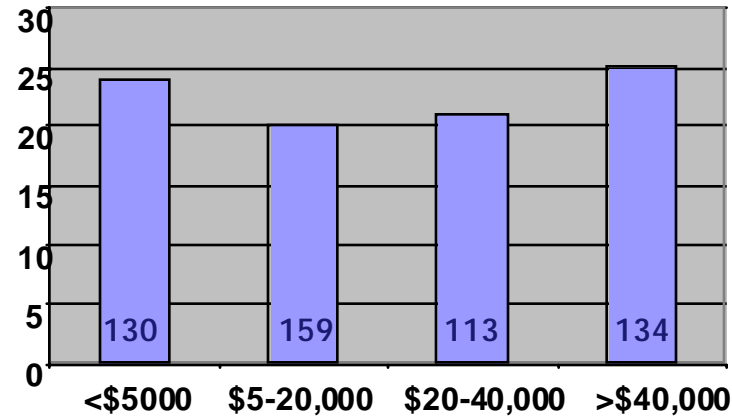


- Over 18 years of age
- Speak/read English
- Must live in Durham County (neighborhood assessment component)
- Singleton gestation, no known congenital abnormalities
- Between 18-28 weeks gestation at recruitment
- Recruitment (current=748; target=1500)
  - Duke OB clinic (409, 121 NHW, 249 NHB, 26 H)
  - Lincoln Community Health Center-Durham County Health Department (339, 20 NHW, 272 NHB, 33 H)

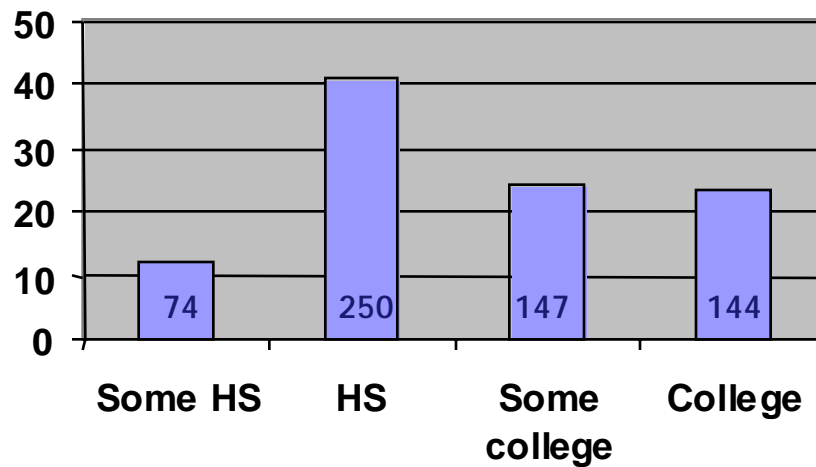


# Demographics of Participants

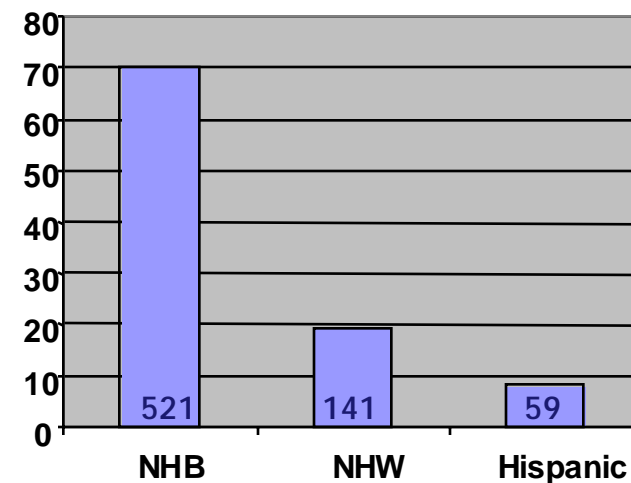
Income (%)



Education (%)



Racial Distribution (%)





## Pregnancy Intention Survey Question

• Think back to just before you were pregnant with this child. How did you feel about becoming pregnant?

- I wanted to be pregnant at that time.
- I wanted to be pregnant sooner.
- I wanted to be pregnant later.
- I didn't want to be pregnant at that time or at any time in the future.

Now

Later

Never



## Pregnancy Intention Status

- Now
  - N=240
  - 39% of participants
- Later
  - N=260
  - 42% of participants
- Never
  - N=113
  - 19% of participants

61% of the pregnancies are mistimed or unwanted





# Psychosocial Instruments

- CES-D

- John Henryism

- ISEL

- Paternal Support

- Self-Efficacy

- Perceived Stress

- NEO



Significant differences across  
intention status



# Depression (CES-D)

Lowest depressive symptoms

Highest depressive symptoms

Now

Later

Never

$p < .08$

$p < .0001$

$p < .0001$



# ISEL- Interpersonal Support

Most support

Least support

Now

Later

Never

$p < .08$

$p < .07$

$p < .01$



# Paternal Support

Most support

Least support

Now

Later

Never

$p < .01$

$p < .0001$

$p < .0001$



# Self-efficacy

Highest Self-efficacy

Lowest Self-efficacy

Now

Later

Never

$p < .05$

$p < .05$



# Perceived Stress

Least perceived stress

Most perceived stress

Now

Later

Never

$p < .09$

$p < .0001$

$p < .0001$



# Extraversion- NEO

Most extraverted

Least extraverted

Now

Later

Never

$p < .08$

$p < .07$

$p < .01$



# Neuroticism- NEO

Least neurotic

Most neurotic

Now

Later

Never

$p < .001$

$p < .001$

$p < .001$





# Personality- NEO

- Openness to Experience
- Agreeableness
- Conscientiousness

Highest

Lowest

Now

Later

Never

Significant

Significant



## Maternal Behaviors

- No differences in tobacco usage between intention statuses.
- No differences in alcohol usage between intention statuses.



# Pregnancy Outcomes

- Birth weight
- Gestational age at delivery
- Prevalence of gestational diabetes
- Pregnancy related hypertension

Intention	Gestational Age
Never*	37.6 weeks
Later	38.2 weeks
Now	38.4 weeks



## Closing points

- Psychosocial indices differ by intention status with “Now” having a healthier psychosocial profile and “Never” having a less healthy psychosocial profile
  - Depression (CES-D)
  - Self-efficacy
  - Interpersonal Support
  - Paternal Support
  - Perceived Stress
  - Personality
- Pregnancy intention is a multifaceted construct.



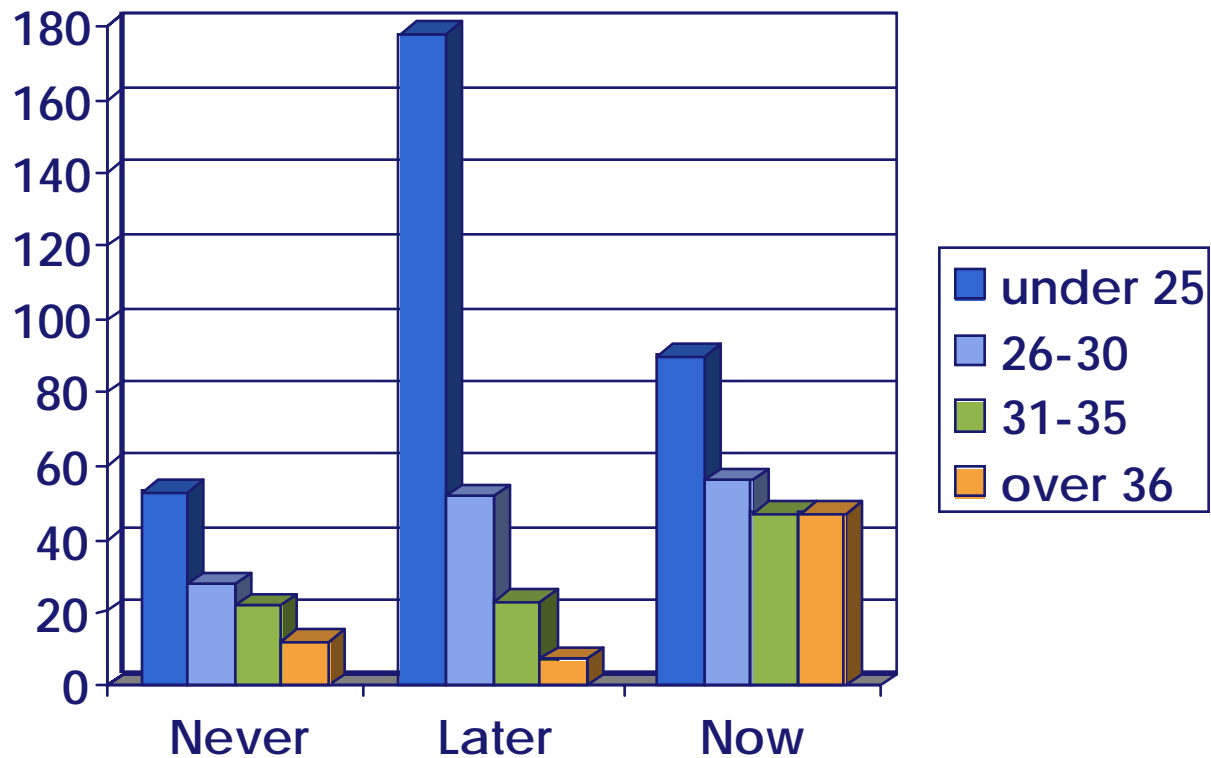
# Acknowledgements

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- Duke University and Medical Center
- Study participants
- Duke University Office of Research Support



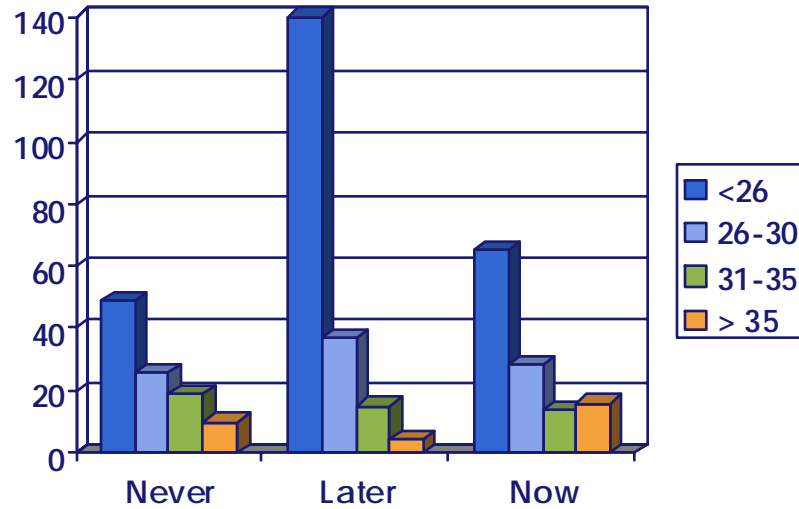


# Pregnancy Intention and Maternal Age

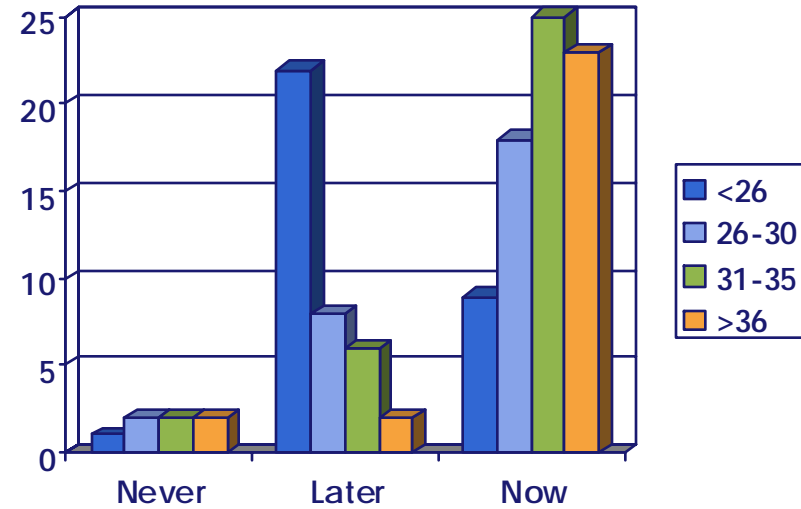




# Race by Maternal Age



Non-Hispanic Blacks

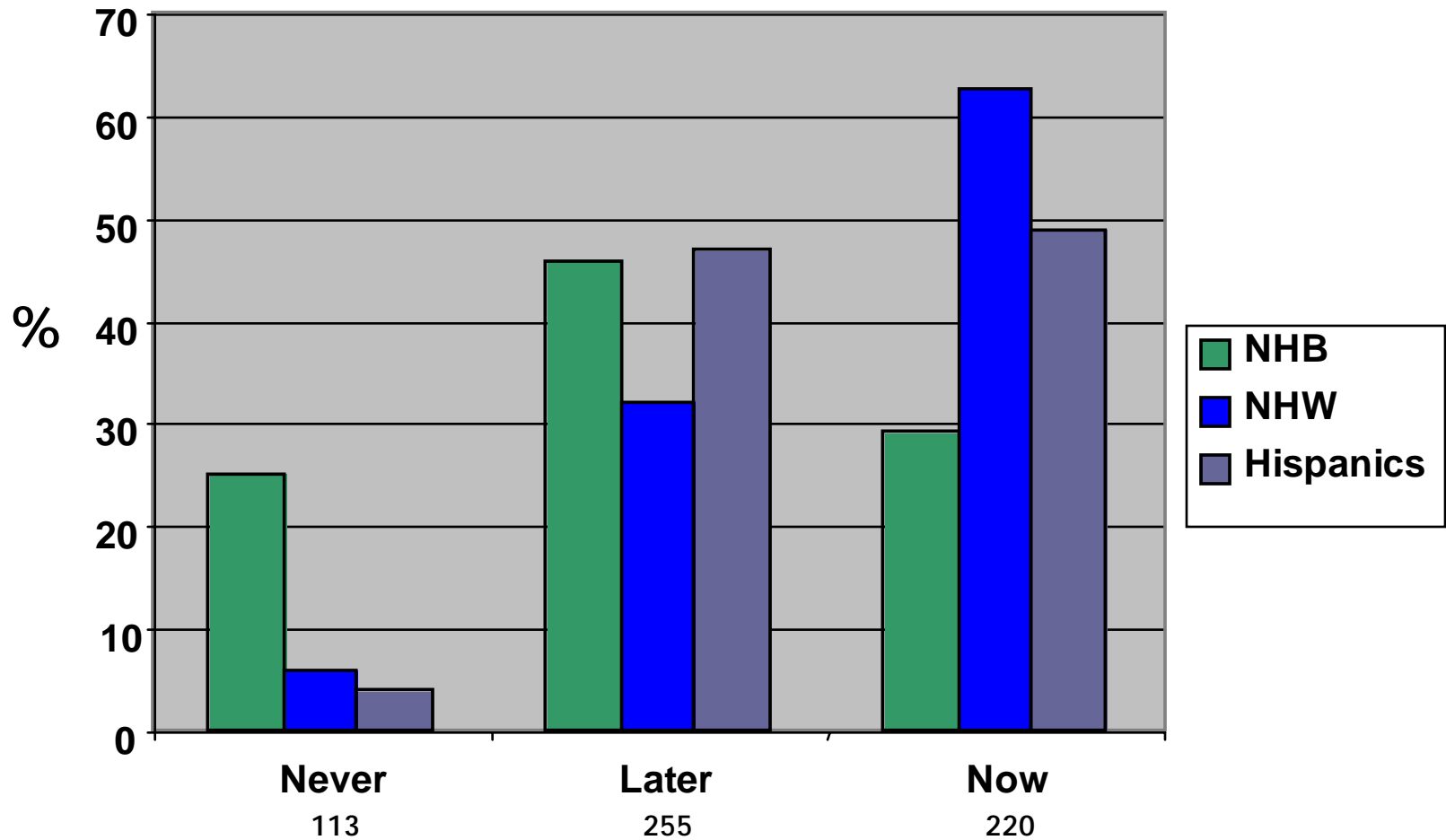


Non-Hispanic Whites



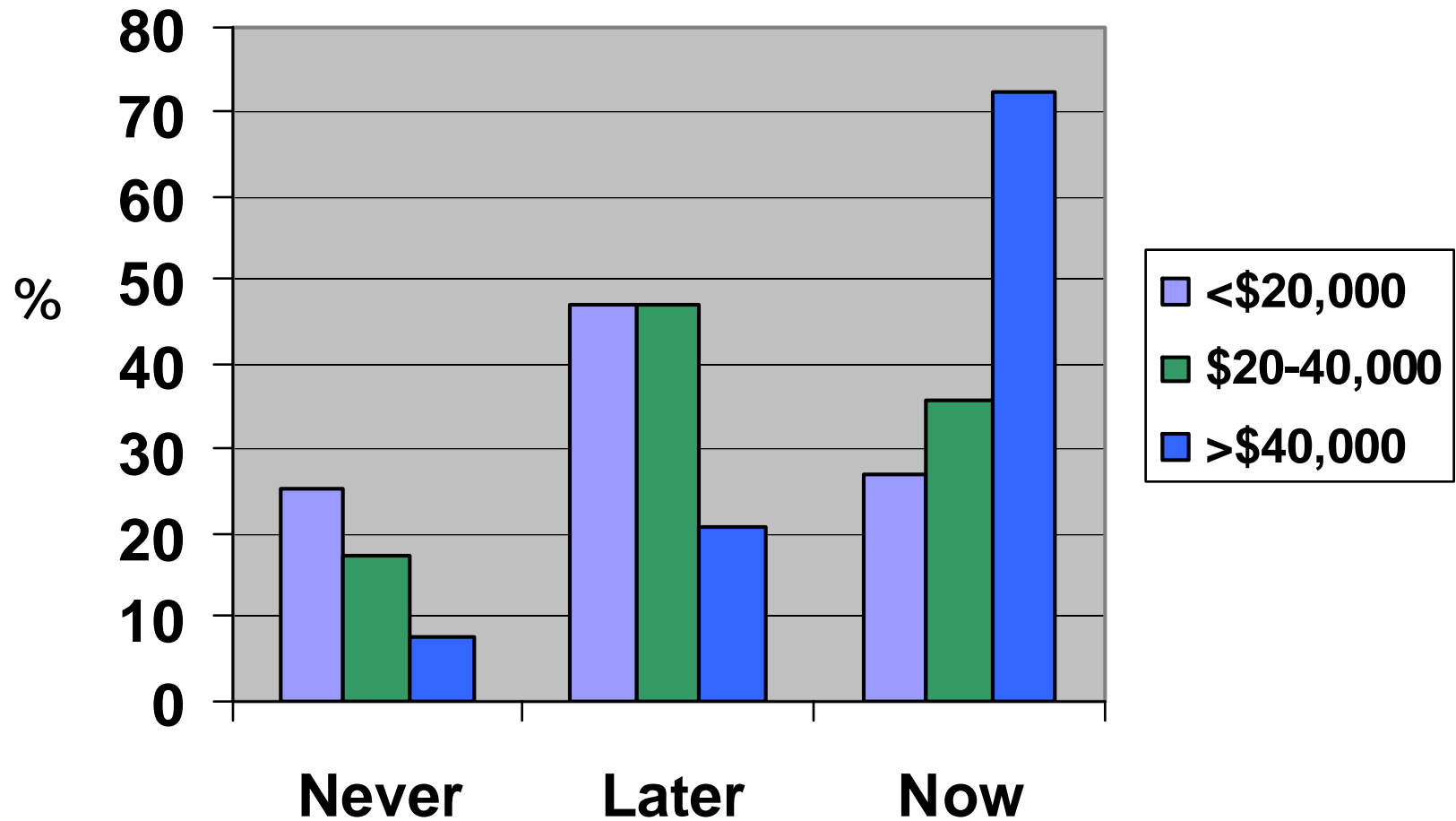


# Pregnancy Intention by Race





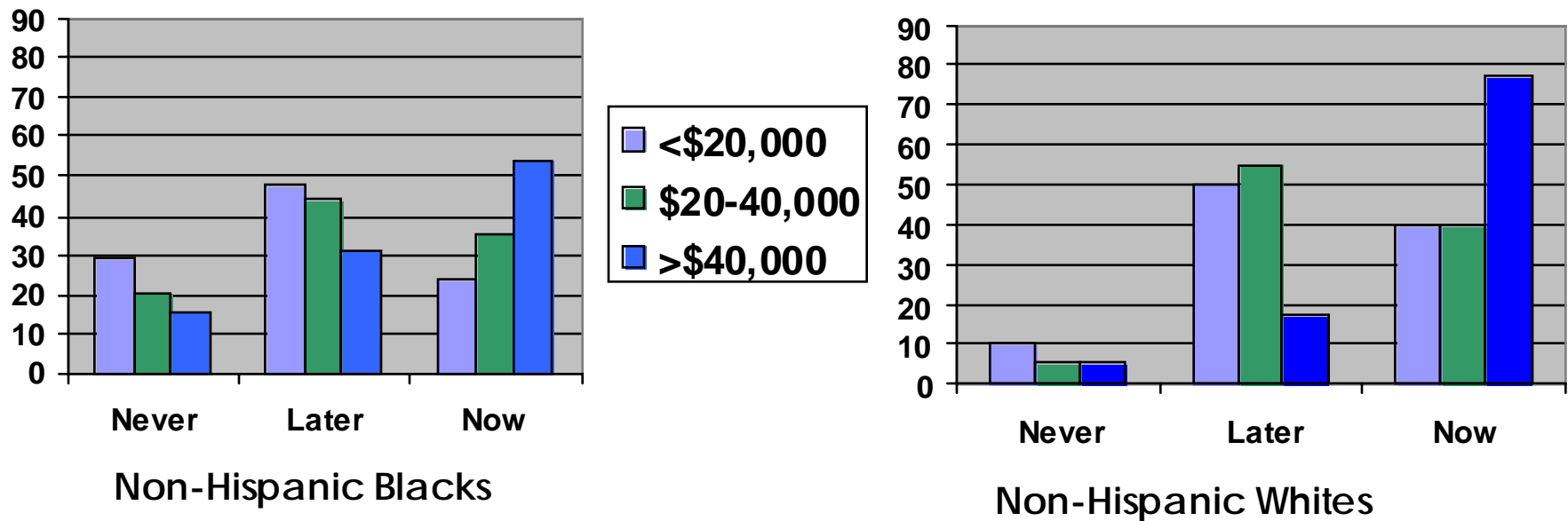
# Pregnancy Intention and Income





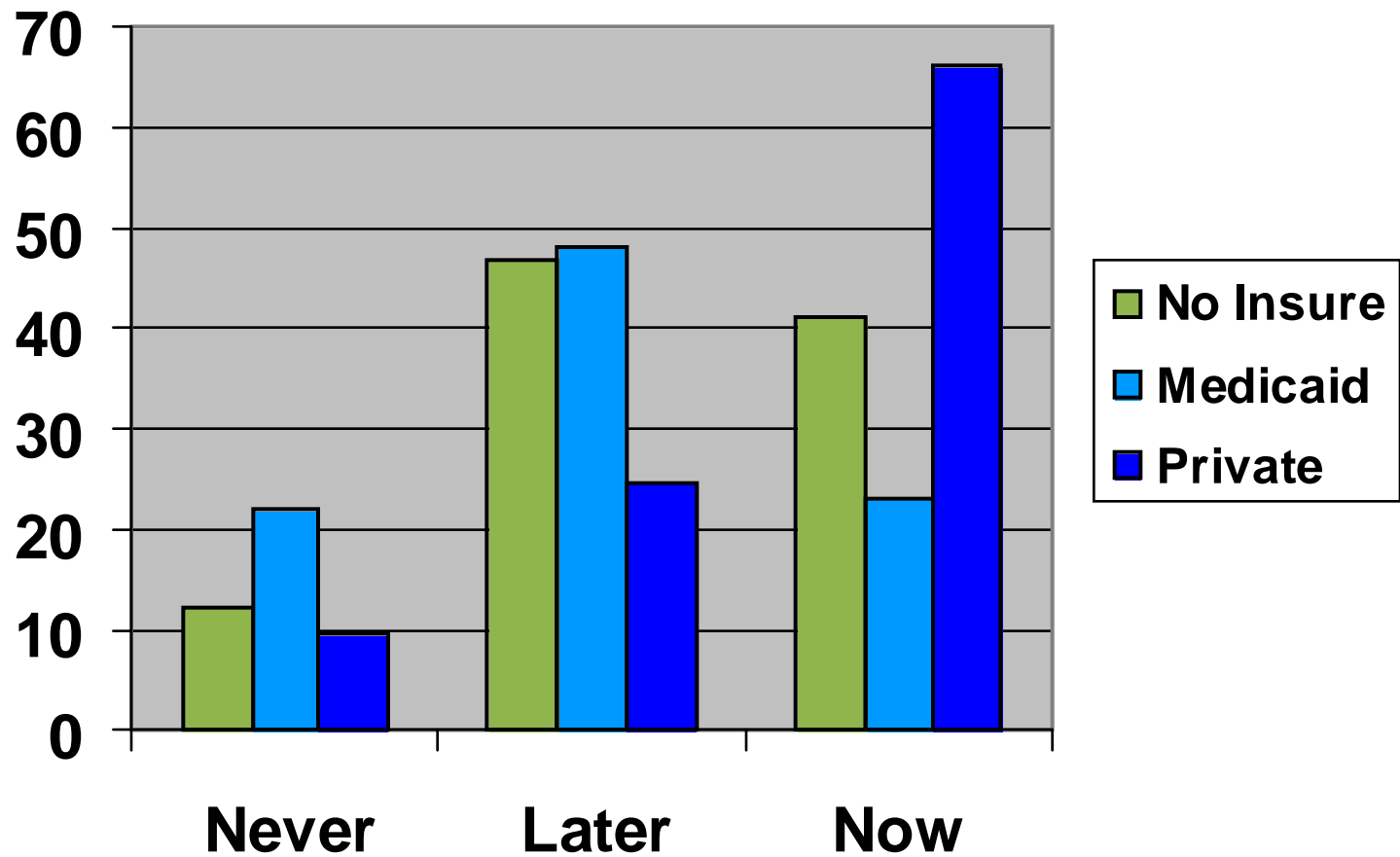
# Pregnancy Intention and Income

## Non-Hispanic Blacks versus Non-Hispanic Whites





# Pregnancy Intention and Insurance





# Paternal Relationship

