
Racial/Ethnic Differences In the Experience of Stressful Life Events During Pregnancy: Data from the Indiana Access Project

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Learning objectives

- Describe the association seen between race/ethnicity and stressful life event constructs in a sample of urban, low-income post-partum women
- Define "stressful life event"
- List the 13 validated stressful life event questions included in PRAMS
- Describe the biological plausibility for stress to contribute to racial/ethnic disparities seen in birth outcomes

Stressful life events (SLE)

- Definition (Wethington et al, 1988)
 - Out-of-ordinary, demanding events
 - Have the capacity to change patterns of life or lead to unpleasant feelings
- Pregnancy Risk Assessment Monitoring System (PRAMS)
 - Thirteen validated questions
 - Family and social support issues, financial and housing issues, legal issues

Purpose

- To better understand the occurrence of SLE in a sample of urban, low-income women
- To examine the relationship between race/ethnicity and the reporting of SLE after controlling for
 - age
 - educational level
 - marital status

Methods

- Approved by Indiana University IRB
- Indiana Access Project
 - Inclusion criteria
 - Medicaid or socioeconomic equivalence
 - Informed consent/consent to release medical records
 - Exclusion criteria
 - Fetal or infant death
 - Infant placed in neonatal intensive care unit (NICU)

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- Face-to-face interview (162 items) with women during post-partum stay (n=525)
 - SLE, utilizing PRAMS questions
 - Marital status
 - Education level

 - File linked to birth certificate data (n=493)
 - Race/ethnicity
 - Age

 - Statistical analysis – multiple logistic regression (SPSS v13.0)
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SLE in PRAMS

1. A close family member was very sick and had to go into the hospital
 2. You got separated or divorced from your husband or partner
 3. You moved to a new address
 4. You were homeless
 5. Your husband or partner lost his job
 6. You lost your job even though you wanted to go on working
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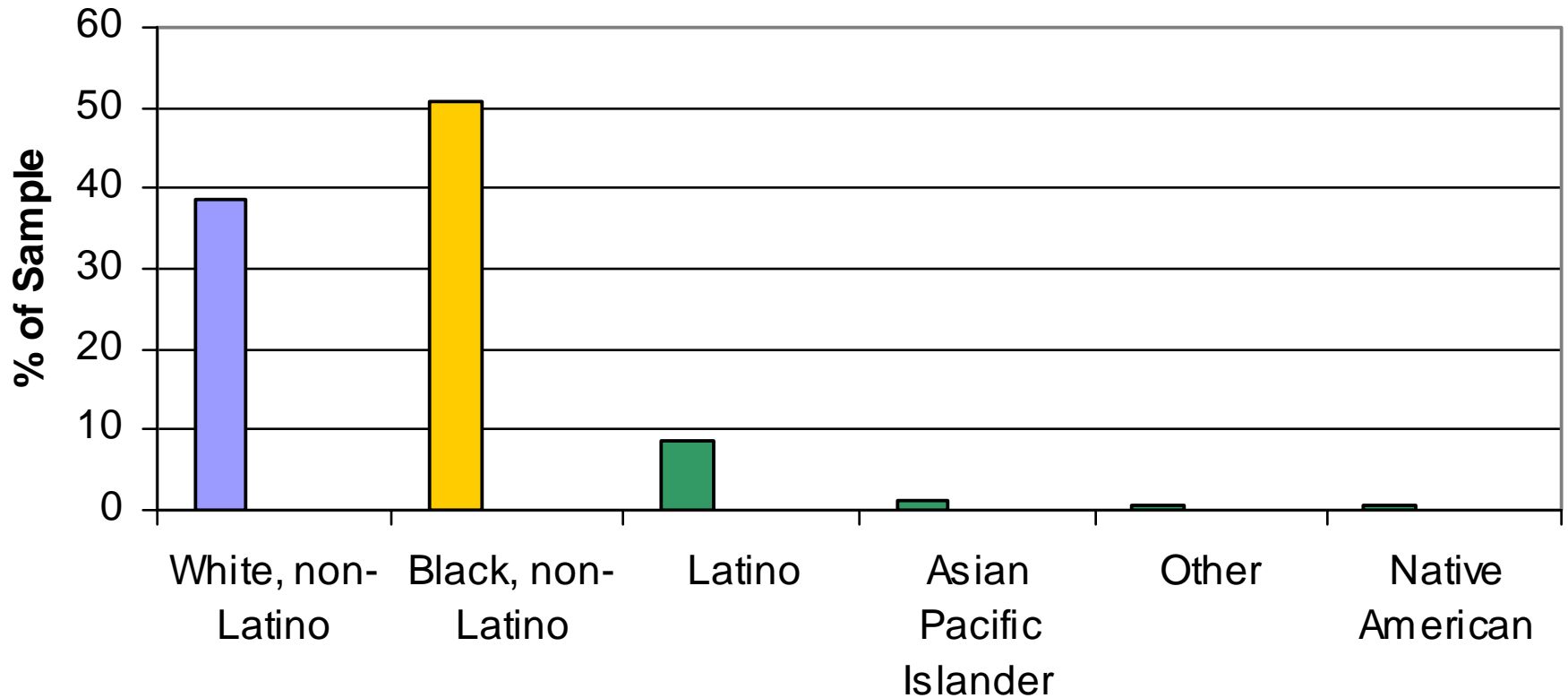
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7. You and your husband or partner argued more than usual
 8. Your husband or partner said he did not want you to be pregnant
 9. You had a lot of bills you couldn't pay
 10. You were involved in a physical fight
 11. You or your husband or partner went to jail
 12. Someone very close to you had a bad problem with drinking or drugs
 13. Someone very close to you died
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SLE constructs (Ahluwalia et al, 2001; Lu and Chen, 2004)

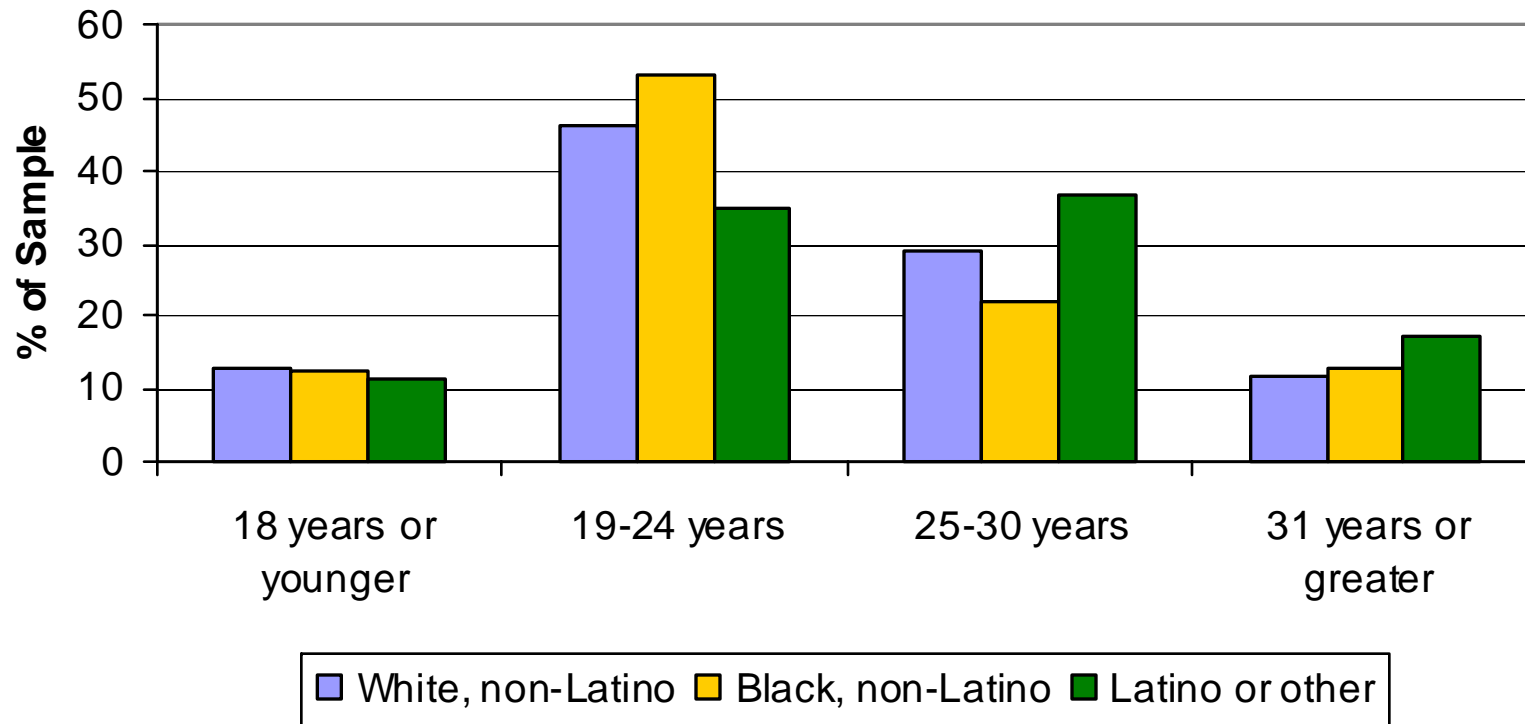
<p><u>Emotional</u></p> <p>Death Hospitalization</p>	<p><u>Financial</u></p> <p>Job loss Bills Moving</p>
<p><u>Partner-related</u></p> <p>Separation Argued with partner Partner didn't want pregnancy</p>	<p><u>Traumatic</u></p> <p>Physical fight Jail Homelessness Friend alcohol/drug problem</p>

Results

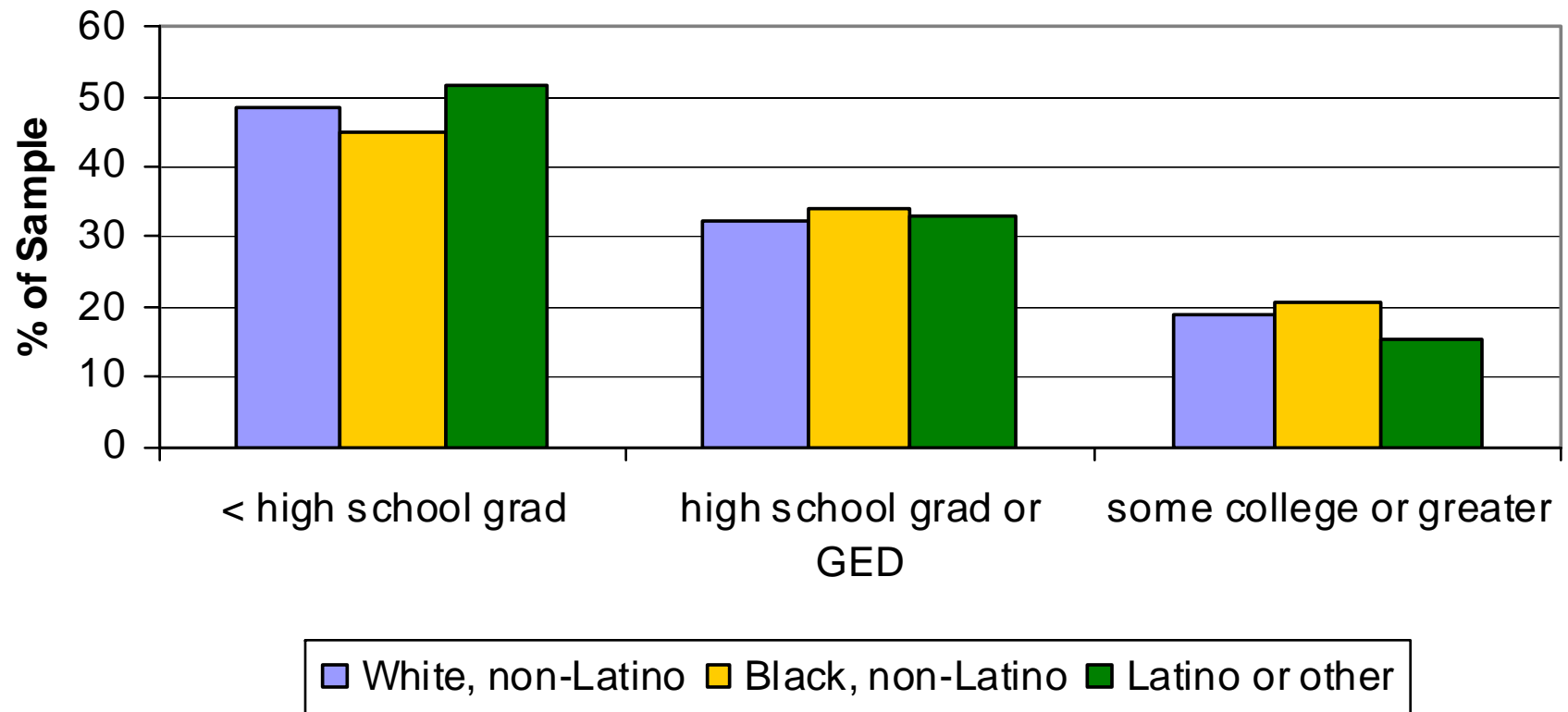
Distribution of race/ethnicity



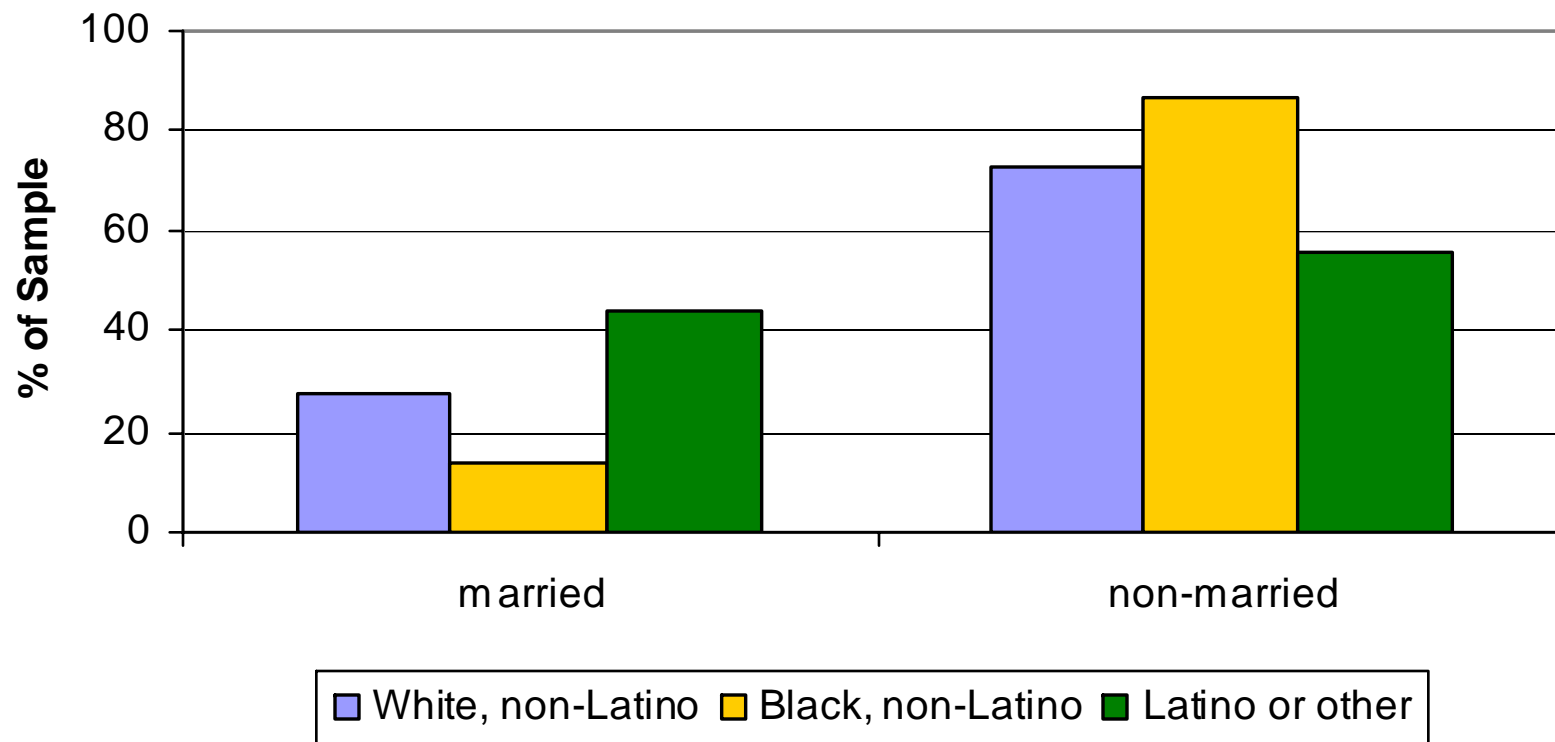
Distribution of age among racial/ethnic groups



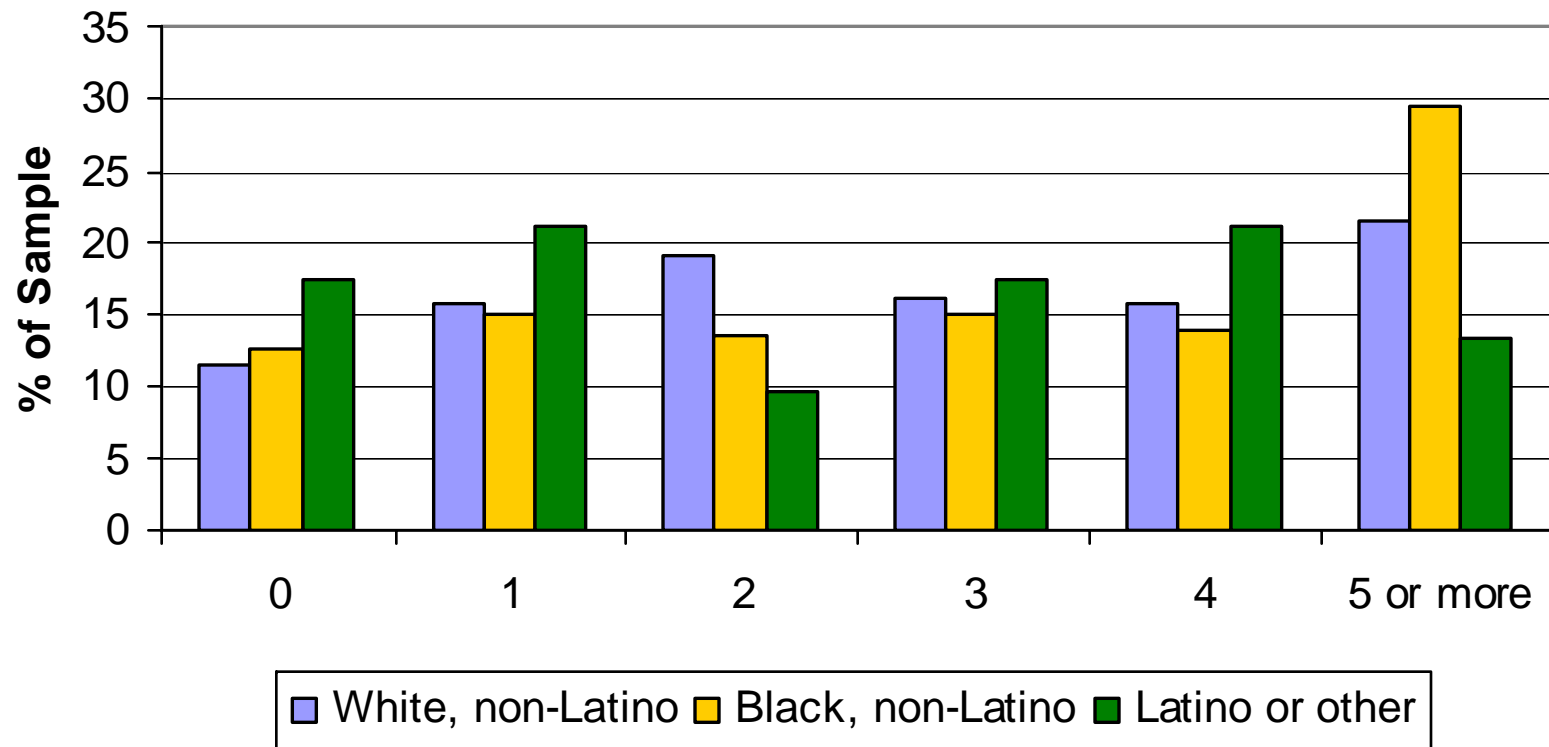
Distribution of mother's education among racial/ethnic groups



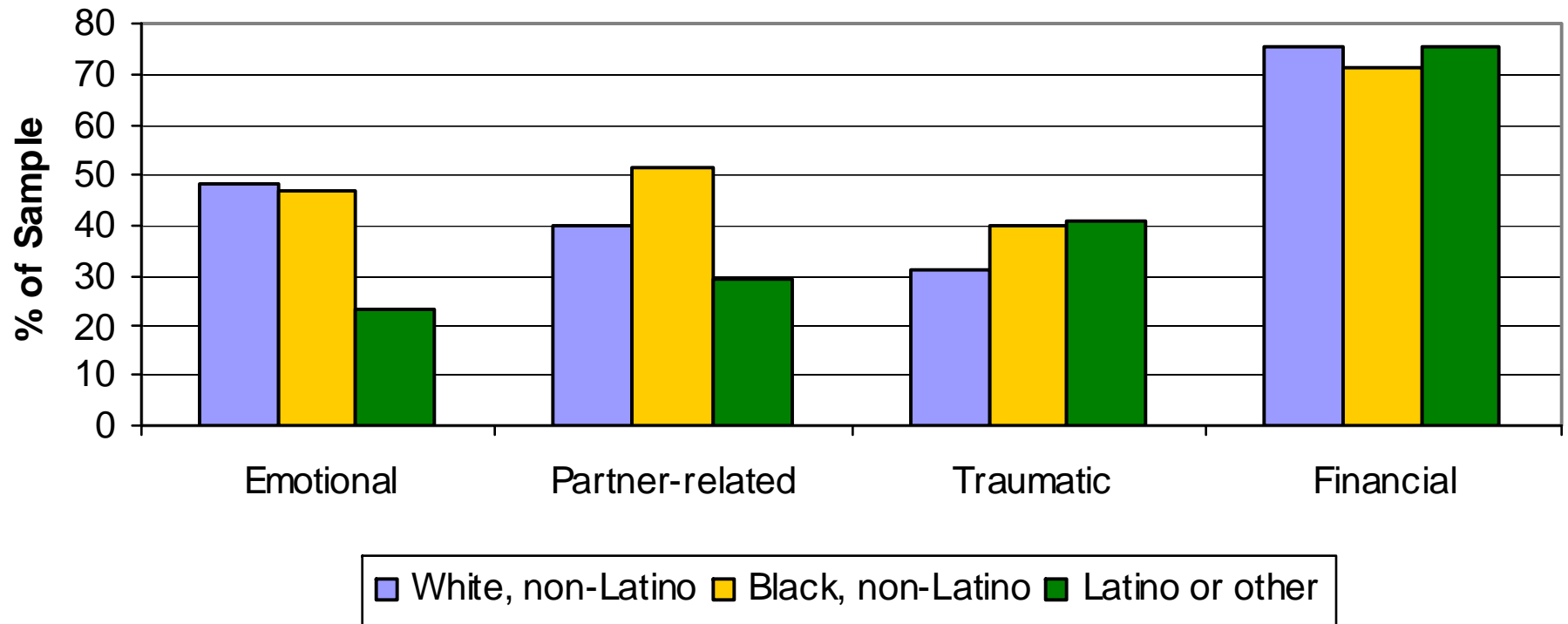
Distribution of mother's marital status among racial/ethnic groups



Total number of SLE reported



Distribution of SLE constructs reported by racial/ethnic group



Emotional SLE construct

- Latino, Native-American, Asian, or other women were 70% less likely to report an SLE in this category (OR=0.3; 95% CI=0.2, 0.6), relative to Caucasian women after controlling for age, educational level, and marital status

Partner-related SLE construct

- African-American women were 1.5 times more likely to report an SLE in this category (OR=1.5; 95% CI=1.0, 2.2), relative to Caucasian women after controlling for age, educational level, and marital status

Traumatic SLE construct

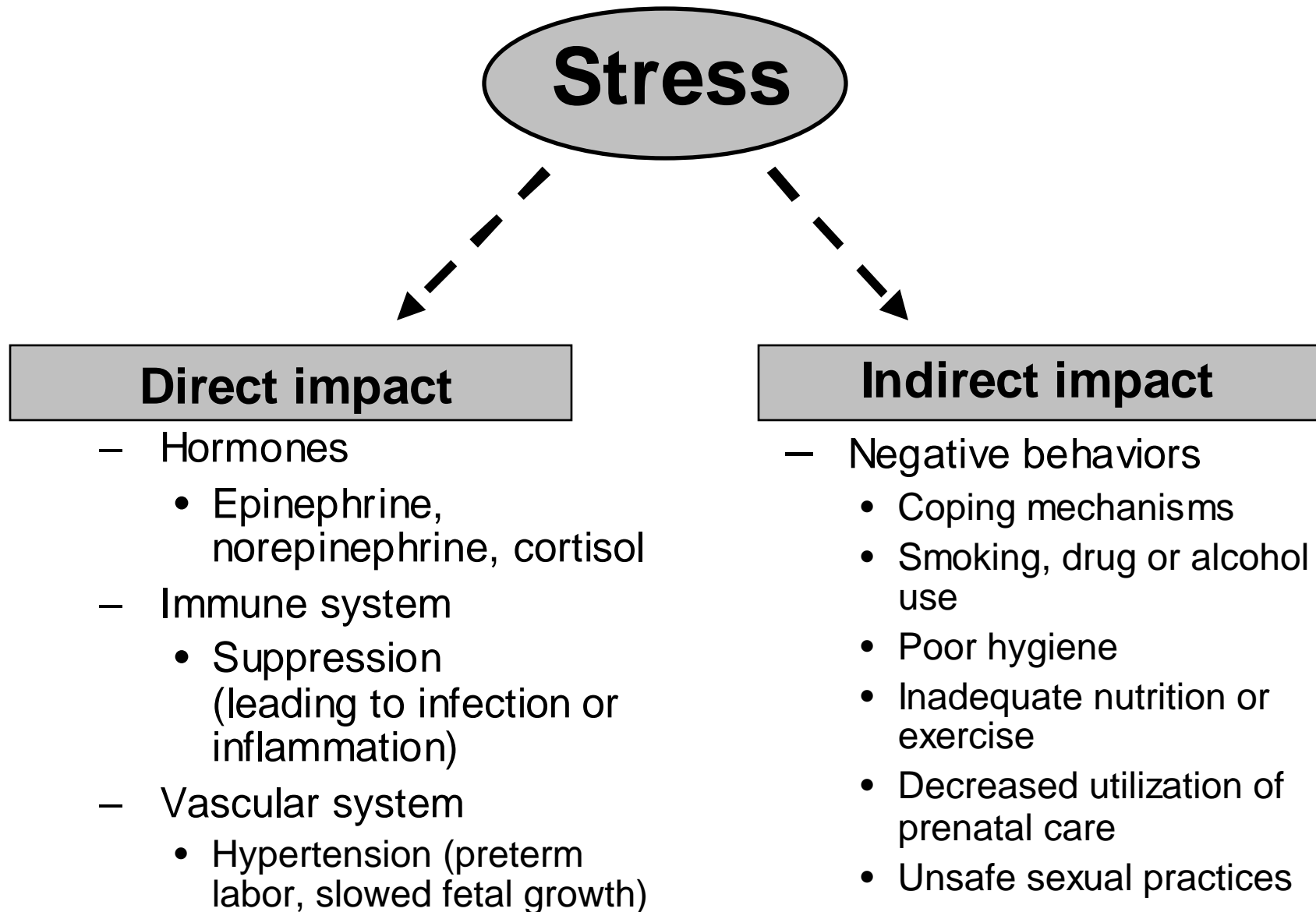
- African-American women were 1.5 times more likely to report an SLE in this category (OR=1.5; 95% CI=1.0, 2.2), relative to Caucasian women after controlling for age, educational level, and marital status

Financial SLE construct

- Relative to Caucasian women and after adjusting for age, education, and marital status, none of the racial/ethnic groups demonstrated a statistically significant difference in the odds of reporting an SLE in this category

Discussion

Stress during pregnancy



(Barbosa,2000; Bullock et al,2001; Dudley,1999; Hobel et al,1998; James,1993; Larriux et al,2004; Mustafa,nd; Wadhwa et al,2001)

Stress, continued

- Minority populations may experience more stressors over the lifetime
 - “Stress age” or “weathering”
 - Allostatic load

(Lu & Halfon, 2003; Patrick & Bryan, 2005; Rowland Hogue & Bremner, 2005)

Limitations

- Representativeness
- No control group
- Selection bias
- Recall bias
- Prevarication bias

Limitations, continued

- Incomplete information regarding stress and support for women in our sample
 - timing
 - additional types of stress
 - women's response to stress
 - available support

Areas for future research

- Utility of these assessment tools in diverse populations
- Assessment of meaning and impact of stress and coping strategies
- Further examination of association between stress and possible physical effects, such as racial/ethnic disparities seen in birth outcomes

Conclusion

- After controlling for age, education, and marital status, an association between race/ethnicity and type of SLE construct reported was observed in a sample of urban, low-income post-partum women
Compared to Caucasian women,
 - Latino, Native-American, Asian, or other women were less likely to report emotional stress (OR=0.3; 95% CI=0.2,0.6)
 - African-American women were more likely to report both partner-related and traumatic stress (OR=1.5; 95%CI=1.0, 2.2)

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Thank You