Dr. Mindi Spencer received her Ph.D. in Life-Span Developmental Psychology from West Virginia University in 2006, with Graduate Certificates in Gerontology and Women's Studies. Her research focuses on how cultural and psychosocial factors influence quality of life in older adulthood. During graduate school, she was involved in collaborative, published research on disability and health care access among American Indian elders, health-related quality of life in Appalachia, discrimination based on sexual orientation, and aging in the rural environment. Her early exposure to the complex health issues faced by diverse populations laid the foundation for a career in health disparities research. As a Kellogg Health Scholar at the University of Pittsburgh Center for Minority Health and Department of Epidemiology, she continued her work in two main areas of research. The first was an attempt to understand the experience of American Indian and African American caregivers using a sociocultural stress and coping framework. For the second, she collaborated with investigators from the Center for Aging and Population Health on analyzing data from the Health, Aging, and Body Composition Study. She used the information from this ongoing 12-year cohort study to examine racial variations in the tandem interaction of self-reported and performance-based measures of physical functioning. Her ultimate goal is to ensure that the results of her research have relevance to long-term care policy and late-life disability prevention. Dr. Spencer is a Fellow of the American Psychological Association Minority Aging Network in Psychology, a Grantmakers in Aging Fellow, an AARP Scholar, and an NIH Health Disparities Scholar. Her postdoctoral fellowship provided her with intensive training in the promotion of equity in aging and translation of health-related research to meaningful policy and practice. Dr. Spencer will continue her work as an Assistant Professor in the Department of Health Promotion, Education, and Behavior at the University of South Carolina, with a joint appointment in the Institute for Southern Studies.
Self-rated health (SRH) is a significant predictor of mortality, and African Americans consistently report poorer SRH than Whites even after controlling for a number of sociodemographic and self-reported health correlates. The health pessimism hypothesis (Ferraro, 1993) suggests that African American elders are more pessimistic about health than Whites and therefore tend to report lower SRH at similar levels of objective health status. Our goal was to test this hypothesis by determining whether racial differences in SRH persisted at similar levels of objective physical functioning while adjusting for known predictors of SRH. Data were drawn from 2,729 men and women (41% African American sample, mean age = 74 years) in the Health, Aging, and Body Composition study. We used hierarchical logistic regression to examine the association between race and SRH while adjusting for demographic, physical health, and psychosocial factors. To test the health pessimism hypothesis directly, these analyses were repeated for participants with comparable scores on an objective, multidimensional physical performance battery. We found that the association between race and SRH remained independent of physical and psychosocial health variables, with Whites being 3.3 times more likely than African Americans to report favorable SRH. After stratifying by objective functional status, White participants in the lowest tertile of functioning were more than twice as likely as African Americans to report favorable SRH. This association was significant at each level of functioning and strongest among the highest functioning participants, where Whites were 5.5 times more likely than African Americans to report favorable SRH. These results support the hypothesis of greater health pessimism among African Americans and suggest that cultural differences may exist in what factors contribute to SRH and the extent to which these factors influence SRH assessments. Our study expanded on previous work by including objective physical functioning in multidimensional models to deconstruct race variations in the SRH of older adults.
A Sociocultural Approach to Understanding Racial Disparities in Late-Life Physical Function

Mindi Spencer, Ph.D.
Kellogg Health Scholar
University of Pittsburgh
Center for Minority Health
M. D. Anderson 6th Annual Summer Workshop
Disparities in Health in America:
Working Toward Social Justice

Presentation Overview
- Healthy People 2010 – a national call for research on aging and health disparities
- Sociocultural context of health
- Health Pessimism in the Health, Aging, and Body Composition Study
- Future directions

Setting a National Research Agenda

U.S. Census Population Projections
- The United States is aging and becoming increasingly diverse...

Life Expectancy at Age 65 by Sex and Race/Ethnicity, 1950-2003

Active and Disabled Life Expectancy by Sex and Race

Figure adapted from Gurin, Land, Blazer, Fillenbaum, and Branch (1993)
### Study Objective

Test the health pessimism hypothesis by determining whether racial differences in SRH persist at similar levels of objective physical functioning while adjusting for known demographic, physical health, and psychosocial predictors of SRH.

### The Health, Aging, and Body Composition Study (Health ABC)

- 10-year prospective cohort study of 3,075 community-dwelling adults aged 70-79.
- Diverse: 42% Black and 52% female, recruited from Pittsburgh and Memphis.
- Current analysis was restricted to participants with complete data on all key variables ($n = 2,729$).

### Domains and Health ABC Variables

<table>
<thead>
<tr>
<th>Primary Predictor</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Demographics</td>
<td>Sex, Education, Age, Site</td>
</tr>
<tr>
<td>+ Physical Health</td>
<td>Health ABC Physical Performance Battery, Number of Prescribed Medications, Ease of Walking 1/4 Mile, Comorbidity, Global Pain, Body Mass Index</td>
</tr>
<tr>
<td>+ Psychosocial Health</td>
<td>Depressive Symptoms, Personal Mastery, Satisfaction with Social Support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Predictor</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Demographics</td>
<td>Sex, Education, Age, Site</td>
</tr>
<tr>
<td>+ Physical Health</td>
<td>Health ABC Physical Performance Battery, Number of Prescribed Medications, Ease of Walking 1/4 Mile, Comorbidity, Global Pain, Body Mass Index</td>
</tr>
<tr>
<td>+ Psychosocial Health</td>
<td>Depressive Symptoms, Personal Mastery, Satisfaction with Social Support</td>
</tr>
</tbody>
</table>
Self-Rated Health of Men by Race

\[ \chi^2 (4, N = 1328) = 99.23, p < .001. \]

Self-Rated Health of Women by Race

\[ \chi^2 (4, N = 1398) = 105.29, p < .001. \]

Logistic Regression Models Results: Significant Predictors

<table>
<thead>
<tr>
<th>Greater if:</th>
<th>Reduced if:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You were a high school graduate</td>
<td>• You were male</td>
</tr>
<tr>
<td>• Had ↑ PPB scores</td>
<td>• Had ↑ medications</td>
</tr>
<tr>
<td>• Reported that walking ¾ mile was easy</td>
<td>• Had ↑ comorbidity</td>
</tr>
<tr>
<td>• Had ↑ personal mastery</td>
<td>• Had ↑ global pain</td>
</tr>
<tr>
<td></td>
<td>• Had ↑ depressive symptomatology</td>
</tr>
</tbody>
</table>

The odds of reporting favorable SRH were...

Odds of Whites Reporting Favorable SRH at Similar Levels of Objective Functioning

<table>
<thead>
<tr>
<th>Least</th>
<th>Medium</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>368</td>
<td>623</td>
<td>651</td>
</tr>
</tbody>
</table>

Logistic Regression Models Results: Race – SRH Association

- Unadjusted Model
  • White elders were 4.2 times more likely than Black elders to report favorable SRH
  • OR (95% CI) = 4.18 (3.35 – 5.21)

- Adjusted Model
  • Relationship between race and SRH remained significant \((p < .001)\), but was attenuated
  • OR (95% CI) = 3.28 (2.52 – 4.27)

Summary of Key Findings

- Addition of physical and psychosocial health variables attenuated the association between race and SRH.

- At similar levels of objective functioning, Whites were more likely to report favorable SRH compared with Black elders.

- Consistent with the hypothesis of greater health pessimism among Black elders.
A Sociocultural Approach to Understanding Disparities in Late-Life Physical Function
Presentation References

Mindi Spencer, Ph.D.
Kellogg Health Scholar
University of Pittsburgh Center for Minority Health


