WORKSHOP: STRATIFICATION IN ACADEMIC CAREER TRAJECTORIES FOR MINORITY PHD RECIPIENTS

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Recent literature suggests that higher education works to reinforce non-Hispanic white, male, middle-class rules and practices (Bonilla-Silva and Embrick 2005).

Our research seeks to better theorize and understand the experiences of NSF-defined underrepresented minorities (URMs) in sociology and economics—black and Hispanic scholars from the 1995-2006 PhD cohorts—as they vary by gender.

We chose these cohorts because all had enough time to become Associate Professors and some had time to become Full Professors.

We ask: Do these URM scholars succeed in higher education?

And: Does participating in URM networks and activities help?

Or, is human capital more important to this success?
This presentation is part of a larger NSF-funded study that compares sociology and economics and attempts to develop concepts of use to both of these disciplines.

We measure aspects of the *stratification processes and outcomes* that may create or re-create inequalities in the academic career trajectories of URMs.

The theoretical concepts to be made operational and tested include the following: human capital and social capital including networks and marginality; also notions of “two worlds” (DuBois 1903) and intersectionality.

Today, we emphasize aspects of these concepts in the discipline of sociology.
SCHEMATIC FOR CATEGORIZATION OF CONCEPTS AND VARIABLES

STRATIFICATION

Human Capital  Intersectionality  “Two Worlds”  Marginality  Social Capital

Examples

PhD from and/or employment at research-extensive university
Race/Ethnicity and Gender
Employment at Historically Black College or University; Hispanic-Serving Institution; Minority-Serving Institution
Inclusion/exclusion in departmental or interdisciplinary scholarly networks
Race and gender of PhD Advisor; e.g., white male; white female; minority male; minority female

Peer-reviewed: publications and external grants
Participation in minority fellowship programs/dissertation fellowships
Co-publishing in peer-reviewed journal articles in graduate school or after graduation
PhD department type
A NEWER VERSION OF THE MODEL?

SOME NOTABLE CHANGES TO THE VARIABLES

LESSON LEARNED: SOME CONCEPTUAL DISTINCTIONS ARE NOT AS CLEAR IN THE ORIGINAL MODEL

FOR EXAMPLE, ARE TWO WORLDS AND SOCIAL CAPITAL MEASURES OF THE SAME PROCESSES?

LOOKING AT HUMAN CAPITAL AND SOCIAL CAPITAL (E.G. BEING AT A RESEARCH INSTITUTION) COULD COUNT FOR BOTH CONCEPTS

CO-PUBLISHING IS ACTUALLY A MEASURE OF SOCIAL CAPITAL NOT MARGINALITY

TWO WORLDS, FOR NOW, INCLUDES MEMBERSHIP IN SPECIAL INTEREST SECTIONS OR SPECIFIC ASSOCIATIONS
VARIABLES IN THE STUDY

**Intersectionality**
Intersectionality is the study of overlapping or *intersecting* social identities and related systems of *domination* or *discrimination*.

- Number of Black men and women, Hispanic men and women

**Human Capital**
Human capital is viewed as the stock of individual attainments embodied in the ability to perform *productive labor* (Price 2009).

- Research I institution as current employer for academics
- Current rank--Associate Prof. in 8 years, Full Prof. in 14 years
- Publication in the top three sociology journals
- Average number of publications post-PhD
VARIABLES IN THE STUDY

Social Capital
Bourdieu (1986) defines the term as resources based on group membership, relationships, networks of influence and support.

• Race/ethnicity of the dissertation advisor

We believe sociologists may consider some of the human capital and two worlds variables as social capital.
VARIABLES IN THE STUDY

Two Worlds (Homophilous or Heterogeneous Worlds)

URM scholars may hold onto a racial/ethnic identity within a white-dominated institution and therefore participate in two worlds by belonging to homophilous networks.

- Graduated from Minority-Serving institution (HBCU/HSI)
- Participant in the ASA Minority Fellowship Program (MFP)
- Member of Minority-Oriented Sections of ASA
- Teach in or Direct a Race/Ethnicity-Oriented Department
- Published in Race/Ethnicity-Oriented Journal(s)
RESEARCH DESIGN

Unobtrusive measures: dependent and independent variables

Selected new PhDs from ASA Graduate Guide. Panel of experts, web pages used to determine race/ethnicity. Used existing datasets and other searches to find information.

Survey instrument and qualitative analysis

Analysis of social networks and participation/marginality via questionnaires and interviews; sample taken from first unobtrusive database will be completed next year.

Overall division of labor

Conducted at seven research sites including ASA, University of Texas-Rio Grande Valley, George Mason University, Georgia Tech, Duke University, Langston University, and the New School for Social Research.
FINDINGS—HUMAN CAPITAL AND INTERSECTIONALITY

• In 2014, about 9 out of 10 members of the entire study universe (n=415) obtained their PhDs from Research I institutions.

• Not all of these PhDs have become academics. About 7 out of 10 are faculty members and/or administrators with faculty rank. The remaining 30% were either never in academia or are no longer in academia.

• Of the 415 under-represented minority scholars in the study, the largest group is Black women (39%).

• There are smaller numbers of Black men (24%) and Hispanic women (22%).

• The smallest group is Hispanic men (15%)
### Percentage of Academic or Nonacademic Status of Universe (N=415)

Latinos most likely to be academics

<table>
<thead>
<tr>
<th>Status</th>
<th>Black Male</th>
<th>Black Female</th>
<th>Latina</th>
<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>60</td>
<td>59</td>
<td>58</td>
<td>76</td>
</tr>
<tr>
<td>Academic/Admin</td>
<td>11</td>
<td>12</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Academic to non-academic</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Non-academic</td>
<td>20</td>
<td>20</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
PRELIMINARY FINDINGS: ACADEMICS IN THE STUDY

• In 2014, for the 332 individuals who were full-time academics—the majority (about 5 out of 10) are Associate Professors, 2 out of 10 are Full Professors, and 3 out of 10 are Assistant Professors.

For the majority of this presentation:

We will be looking at 332 full-time academics, including faculty members and administrators with faculty rank).
Frequencies of Men and Women by Race/Ethnicity (Academics Only, N=332)

Black Women are the Largest Group

- Black (N=211): 132 Women, 79 Men
- Latino/a (N=121): 69 Women, 52 Men
- Of the 332 full-time academics, about 5 out of 10 are employed at Research I institutions.

- Of the full-time academics who earned the rank of Associate Professor (this includes the Full Professors below), approximately 8 out of 10 were promoted in 8 years or less while the remainder were not.

- Of the full-time faculty members who earned the rank of Full Professor, about 8 out of 10 were promoted in 14 years or less and the remainder were not.

- About 3 out of 10 full-time faculty members are still at the rank of Assistant Professor.
### Percentage of Current Academic Status By Race/Ethnicity and Gender

**Latinos most likely to be associate professors, Black women most likely to be assistant professors**

<table>
<thead>
<tr>
<th></th>
<th>Black Male</th>
<th>Black Female</th>
<th>Latina</th>
<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>20</td>
<td>33</td>
<td>29</td>
<td>17</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>45</td>
<td>42</td>
<td>48</td>
<td>62</td>
</tr>
<tr>
<td>Full Professor</td>
<td>18</td>
<td>13</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Contingent</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
INTERSECTIONALITY AND HUMAN CAPITAL

An initial intersectional analysis shows differences.

• Hispanic men are more likely to have earned an Associate Professor position. In the sample, Hispanic men are also more likely to obtain Full Professor positions and less likely to occupy Assistant Professor positions.

• Fewer Black women and Hispanic women have reached the rank of Associate Professor than their male counterparts.

• Black women are less likely to have obtained an Associate Professor position, while being more likely to occupy an Assistant Professor position.

• In the sample, Black and Hispanic women have fewer Full Professors, and those that earn Full Professor are less likely do so within 14 years of the PhD, compared to their male counterparts.
Percentage of Academics Reaching Benchmarks (Associate Prof. within 8 years and Full Prof. within 14 Years) (Latino Men are the Most Likely)

- Black Male: 47, 21
- Black Female: 40, 17
- Latina: 46, 14
- Latino: 60, 28

Legend:
- Blue: Made Associate Professor in 8 yrs or less
- Red: Made Full Professor in 14 yrs
Percentage of Assoc. Professors at R1 University

- Black Male: 34% Yes, 66% No
- Black Female: 32% Yes, 68% No
- Latina: 32% Yes, 68% No
- Latino: 40% Yes, 60% No

Legend: Yes, No
Of the 332 full-time academics that participated in activities that we label as participating in homogeneous (or minority-oriented) groups, we find:

- The majority of URM academics have published in a race or ethnic oriented journal (just over 5 out of 10 have done this);

- Followed by over 2 out of 10 who joined an ASA Section that has to do with URM scholars (Section on Racial and Ethnic Minorities; Section on Latina/Latino Sociology; and Section on Race, Class, and Gender);

- 1 out of 10 have graduated from an HSI or HBCU institution;

- 17% teach in or direct a department emphasizing race and/or ethnicity;

- 7% were awardees in ASA’s Minority Fellowship Program (MFP)
Percentage of Academics Published in a Race/Ethnicity Journal
(Black Men and Latinas are the Most Likely)

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black M</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Black F</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>Latina</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>Latino</td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>
MORE ON TWO WORLDS

The table below suggests that about two-thirds of the 332 academics in this study participated in a minority-oriented world as well as a white-dominated world, with the largest group participating in one such activity.

<table>
<thead>
<tr>
<th>Number of Activities</th>
<th>Percent of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>38.3</td>
</tr>
<tr>
<td>1</td>
<td>38.0</td>
</tr>
<tr>
<td>2</td>
<td>13.6</td>
</tr>
<tr>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>5</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Activities include: membership in any of the three ASA sections: Latino/a, Race/Gender/Class, or Racial/Ethnic Minorities; participation in the ASA Minority Fellowship Program (MFP); publishing in race/ethnicity journals; and/or graduating from a minority-serving institution (MSI).
CONCLUSIONS BASED ON CROSS-TABS

• These findings demonstrate some preliminary understandings of the world of URM scholars. We find that intersectionality is important, with black women seemingly at the bottom of the hierarchy.

• We find that those who become full-time faculty members appear to be doing relatively well in terms of their career trajectories, as about 7 out of 10 appear to be doing relatively well along these lines.
CONCLUSIONS BASED ON CROSS-TABS

• We hypothesized that participation in activities designed for URM scholars may help career ladders, because there is **support in the homophilous world not present in a heterogeneous one.**

• But, **we need to know more** in order to understand the impact of this participation more fully and what helps these scholars to succeed.

• The **regression analyses to follow** will help us to answer these questions.
# Results: Regression Models With Odds Ratios

<table>
<thead>
<tr>
<th>Variable List</th>
<th>Assoc. Professor [Exp(B)]</th>
<th>Pseudo R-Squared = 0.32</th>
<th>Assoc. Professor/R1 [Exp(B)]</th>
<th>Pseudo R-Squared = 0.34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race of Subject (Black = 1)</td>
<td>.767</td>
<td></td>
<td>1.274</td>
<td></td>
</tr>
<tr>
<td>Sex of subject (Female = 1)</td>
<td><strong>.452</strong></td>
<td></td>
<td><strong>.850</strong></td>
<td></td>
</tr>
<tr>
<td>Participation in MFP</td>
<td>.784</td>
<td></td>
<td>2.160</td>
<td></td>
</tr>
<tr>
<td>Employed race/ethnicity dept.</td>
<td>1.662</td>
<td></td>
<td><strong>3.998</strong>*</td>
<td></td>
</tr>
<tr>
<td>Graduated from MSI</td>
<td>1.865</td>
<td></td>
<td>.489</td>
<td></td>
</tr>
<tr>
<td>Joined minority ASA section</td>
<td><strong>3.992</strong>**</td>
<td></td>
<td><strong>3.040</strong>**</td>
<td></td>
</tr>
<tr>
<td>Minority dissertation adviser</td>
<td>.796</td>
<td></td>
<td>1.350</td>
<td></td>
</tr>
<tr>
<td>Carnegie Research I (Employed)</td>
<td>.791</td>
<td></td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>Published in top 3 journals</td>
<td>.813</td>
<td></td>
<td><strong>3.205</strong>**</td>
<td></td>
</tr>
<tr>
<td>Avg. peer-reviewed pubs per year</td>
<td><strong>4.346</strong>*</td>
<td></td>
<td><strong>2.930</strong>*</td>
<td></td>
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<tr>
<td>Published race/ethnicity journal</td>
<td><strong>2.508</strong>**</td>
<td></td>
<td>1.069</td>
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</tr>
<tr>
<td>Constant</td>
<td>1.200</td>
<td></td>
<td>.087</td>
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</table>

*Note: Bold values indicate statistical significance.*
CONCLUSIONS BASED ON REGRESSION MODELS

• We report on two dependent variables from the regression analysis: Earning the Rank of Associate Professor and Earning the Rank of Associate Professor at a Research I Institution.

• We used the second measure at a Research I institution because it remains the “ideal” career to which PhD students are socialized.

• Scholars who have earned Full Professor rank are included in the analysis but separate models are not run on Earning the Rank of Full Professor because the small cell sizes do not provide enough statistical power (yet).
CONCLUSIONS BASED ON REGRESSION MODELS

• Each of the models show human capital and two worlds variables to be significant…but they vary. The predictive power of the models (shown by the Pseudo R-squares) are relatively high for social science—about 1/3 of the variance explained.

• For Earning Associate Professor, the significant variables are joining a minority-oriented section, average number of publications, publishing in a race/ethnicity journal, and sex.

• For Earning Associate Professor at a Research I Institution, the significant variables are joining a minority-oriented section, average number of publications, publishing in a “top 3” sociology journal, and teaching in a race/ethnicity department.
CONCLUSIONS BASED ON REGRESSION MODELS

• Publishing more is helpful in any context of earning Associate Professor.

• Women are less likely to earn Associate Professor overall, but sex appears to be less important at Research I institutions.

• Showing the importance of participating in two worlds, publishing in race/ethnicity-oriented journals and being in minority-oriented ASA sections help earn Associate Professor overall.

• But, at Research I institutions, publishing in the “top 3” sociology journals—ASR, AJS, and Social Forces—is important.

• Being in a race/ethnicity-oriented department helps earn Associate Professor at a Research I institution, implying that work on race/ethnicity topics is valued more in such departments.
NEXT STEPS IN THE PROJECT

• Compare findings with the parallel database (still being built by the New School team) for the discipline of economics (for a presentation forthcoming at American Economic Association meeting in January 2017).

• Go beyond the percentages and numbers and increase the explanatory power of our variables by conducting a survey of URM scholars about their experiences.

• The survey will deal especially with inclusion and exclusion within academic departments and disciplines. This should increase the explanatory power of the analyses.
Questions?

• How do these findings fit with your experiences in academia?

• What additional concepts would you add or redefine, or how would you re-categorize the indicators of the concepts?

• What do you expect in terms of issues such as marginality and inclusion or exclusion?

• What questions would you like to see on the upcoming survey questionnaire?
THANK YOU!

For further discussion or help, please contact:

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