PATTERNS OF DEPRESSION AMONG ELDERLY ASIAN IMMIGRANTS TO THE UNITED STATES OVER THE PAST DECADE

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The NACDA data archive has spent the past 35 years identifying, gathering and organizing data on aging and the aging life course so we can share these resources with the research community.

NACDA currently supports approximately 1,600 individual studies on ageing and health and adds 30 to 50 new studies to our collections each year.

NACDA is part of ICPSR
ABSTRACT

• Immigrants in the United States often face increased stressors associated with the transitions from an established home to a new environment. Factors such as cultural displacement, language barriers, economic and employment concerns, immigration status and safe housing can all contribute to fears that can manifest themselves in depression or anxiety.

• These risks can be further intensified when the individual is elderly, and their health, socioeconomic status and social support networks within the United States are weakened. This paper will use eleven years of the National Health Interview Survey (NHIS) to examine patterns of social anxiety among the elderly Asian population. The paper will compare immigrant elders to native born Asian elders and control for citizen status, sociodemographic characteristics, health factors and household composition to isolate the impacts of immigration on mental health outcomes.
• Health Risks: Personal Behaviors, as well as Social, Economic and Environmental Factors

• Health Treatments: How health problems are treated from ER care to Personalized Medicine to Non Traditional Medicines

Health Outcomes: Survival, Quality of Life, Long Term Results

Collectively these provide a metric for the success of the Health Care Provision System
“conceptual framework for thinking about why some populations are healthier than others.”
The National Health Interview Survey (NHIS) has monitored the health of the nation since 1957. NHIS data on a broad range of health topics are collected through personal household interviews. For over 50 years, the U.S. Census Bureau has been the data collection agent for the National Health Interview Survey.

Survey results have been instrumental in providing data to track health status, health care access, and progress toward achieving national health objectives.
POOLED NHIS SAMPLE

• The elder population aged 50 and older was pooled across 11 years of data due to the small number of Asian respondents captured in any given year.
• The pooled sample is weighted for analysis with adjustments for the pooled sample and with bias corrections for sampling design.
<table>
<thead>
<tr>
<th>Age</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 50 to 59</td>
<td>43,801</td>
<td>9,737</td>
<td>2,776</td>
<td>56,314</td>
</tr>
<tr>
<td></td>
<td>36.01</td>
<td>41.92</td>
<td>38.28</td>
<td>37.02</td>
</tr>
<tr>
<td>Age 60 to 69</td>
<td>37,714</td>
<td>7,097</td>
<td>2,225</td>
<td>47,036</td>
</tr>
<tr>
<td></td>
<td>31.01</td>
<td>30.55</td>
<td>30.69</td>
<td>30.92</td>
</tr>
<tr>
<td>Age 70 and older</td>
<td>40,111</td>
<td>6,394</td>
<td>2,250</td>
<td>48,755</td>
</tr>
<tr>
<td></td>
<td>32.98</td>
<td>27.53</td>
<td>31.03</td>
<td>32.05</td>
</tr>
<tr>
<td>Total</td>
<td>121,626</td>
<td>23,228</td>
<td>7,251</td>
<td>152,105</td>
</tr>
<tr>
<td></td>
<td>79.96</td>
<td>15.27</td>
<td>4.77</td>
<td>100.00</td>
</tr>
</tbody>
</table>
KESSLER 6

• The six-item K6 screening scale for psychological distress is one of the most widely used measures, for either screening or severity. Developed by Kessler and colleagues (Kessler et al., 2002), as a measure of nonspecific psychological distress using a 30-day reference period (Fleishman & Zuvekas, 2007; Furukawa, et al., 2003). In assessing the utility of the K6, two types of studies are common.

• First, the ability of the K6 to predict DSM-based diagnoses has been explored in a wide range of samples (Baggaley et al., 2007; Veldhuizen, Cairney, Kurdyak, & Streiner, 2007).

• Second, investigators have examined the degree to which the K6 is related to known correlates of severity (Fleishman & Zuvekas, 2007; Kessler, et al., 2003; Swartz & Lurigio, 2006).

• The outcomes of these efforts have indicated that the K6 is both an effective screening measure and an indicator of distress severity among the populations that have participated to date. Indeed, Kessler and others have advocated for the inclusion of this measure as a standardized measure in those contexts where fuller assessments of disorder and severity are not possible.
Choi examined the measurement equivalence of the K6 between older Whites and older Asians. Based on the results, it was concluded that the K6 can be used for both populations to assess their psychological distress.

CROSS-CULTURAL EQUIVALENCE OF THE KESSLER 6 SCALE (K6) BETWEEN WHITE-AMERICAN AND ASIAN ELDERS

### KESSLER 6 QUESTIONNAIRE

A6. During the *past 4 weeks* (28 days), how much of the time did you feel...

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>A6a. ...so sad nothing could cheer you up?</td>
<td>○○○○○○○○○○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6b. ...nervous?</td>
<td>○○○○○○○○○○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6c. ...restless or fidgety?</td>
<td>○○○○○○○○○○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6d. ...hopeless?</td>
<td>○○○○○○○○○○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6e. ...that everything was an effort?</td>
<td>○○○○○○○○○○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6f. ...worthless?</td>
<td>○○○○○○○○○○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MEASURING IMMIGRATION STATUS

• Born in the United States
• Born outside the United States
  • Naturalized Citizen
  • Not a Naturalized Citizen
• The use of the three measures is recommended
CITIZENSHIP STATUS AMONG THOSE 50+

White: 89.0% US Born, 7.6% US Citizen, 3.4% Not Citizen

Black: 88.9% US Born, 8.0% US Citizen, 3.1% Not Citizen

Asian: 63.4% US Born, 19.0% US Citizen, 17.6% Not Citizen
DURATION IN THE US AMONG ASIANS AGED 50+
BY IMMIGRATION STATUS

<table>
<thead>
<tr>
<th>Duration</th>
<th>US Citizen</th>
<th>Not Citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 yrs.</td>
<td>1.06</td>
<td>18.04</td>
</tr>
<tr>
<td>5 yrs. to 10 yrs.</td>
<td>2.13</td>
<td>18.53</td>
</tr>
<tr>
<td>10 to 15 yrs.</td>
<td>6.26</td>
<td>14.07</td>
</tr>
<tr>
<td>15 years or more</td>
<td>90.55</td>
<td>49.36</td>
</tr>
</tbody>
</table>
KESSLER 6 STATUS AMONG 50+ IN US

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>85.6</td>
<td>83.4</td>
<td>89.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>9.8</td>
<td>11.8</td>
<td>7.6</td>
</tr>
<tr>
<td>High</td>
<td>4.6</td>
<td>4.8</td>
<td>3.4</td>
</tr>
</tbody>
</table>
ANNUAL KESSLER 6 STATUS MODERATE AND HIGH RISK: ASIANS 50+
LET’S TALK ABOUT HETEROGENEITY

Lumpers and Splitters
CITIZEN STATUS AMONG THOSE 50+ IN US

- **White**
  - US Born: 89.0
  - US Citizen: 7.6
  - Not Citizen: 3.4

- **Black**
  - US Born: 88.9
  - US Citizen: 8.0
  - Not Citizen: 3.1

- **Asian Indian**
  - US Born: 78.4
  - US Citizen: 20.7
  - Not Citizen: 1.0

- **Chinese**
  - US Born: 69.2
  - US Citizen: 16.4
  - Not Citizen: 14.4

- **Filippino**
  - US Born: 57.1
  - US Citizen: 27.3
  - Not Citizen: 15.7

- **Other Asians**
  - US Born: 59.1
  - US Citizen: 22.4
  - Not Citizen: 18.5
KESSLER 6 STATUS AMONG THOSE 50+ IN US

- **White**: 85.6% Low, 9.8% Moderate, 4.6% High
- **Black**: 83.4% Low, 11.8% Moderate, 4.8% High
- **Asian Indian**: 90.8% Low, 5.2% Moderate, 4.0% High
- **Chinese**: 91.5% Low, 6.8% Moderate, 1.8% High
- **Filippino**: 88.7% Low, 7.8% Moderate, 3.5% High
- **Other Asians**: 87.2% Low, 8.9% Moderate, 4.0% High
KESSLER 6 STATUS AMONG THOSE 50+ IN US BY IMMIGRATION STATUS

<table>
<thead>
<tr>
<th>Category</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asn-Not Citizen</td>
<td>88.2</td>
<td>7.8</td>
<td>4.1</td>
</tr>
<tr>
<td>Asn-US Citizen</td>
<td>89.3</td>
<td>7.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Asn-US Born</td>
<td>88.7</td>
<td>7.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Blk-Not Citizen</td>
<td>87.0</td>
<td>9.8</td>
<td>3.3</td>
</tr>
<tr>
<td>Blk-US Citizen</td>
<td>86.9</td>
<td>10.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Blk-US Born</td>
<td>83.0</td>
<td>12.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Wht-Not Citizen</td>
<td>82.9</td>
<td>10.8</td>
<td>6.3</td>
</tr>
<tr>
<td>Wht-US Citizen</td>
<td>82.2</td>
<td>12.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Wht-US Born</td>
<td>86.0</td>
<td>9.6</td>
<td>4.4</td>
</tr>
</tbody>
</table>
IMPACTS OF HEALTH ON ANXIETY
ANXIETY AND SELF REPORTED HEALTH BY ETHNICITY: 50+

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wht</td>
<td>93.7%</td>
<td>86.3%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Blk</td>
<td>93.1%</td>
<td>88.0%</td>
<td>68.1%</td>
</tr>
<tr>
<td>As</td>
<td>95.0%</td>
<td>97.7%</td>
<td>73.1%</td>
</tr>
</tbody>
</table>

- Low: Blue
- Moderate: Green
- High: Red
ANXIETY AND SELF REPORTED HEALTH BY DETAILED ASIAN ETHNICITY: 50+

Low | Moderate | High
--- | --- | ---
AI-Excellent: 95.9 | 1.4 | 2.7
AI-Good: 91.6 | 2.7 | 5.7
AI-Fair: 69.6 | 14.2 | 16.2
Ch-Excellent: 94.9 | 0.8 | 4.3
Ch-Good: 93.1 | 1.5 | 5.4
Ch-Fair: 77.5 | 5.3 | 17.2
Fl-Excellent: 93.8 | 1.2 | 4.1
Fl-Good: 88.2 | 7.7 | 7.7
Fl-Fair: 74.4 | 9.2 | 9.2
OA-Excellent: 95.7 | 0.8 | 3.5
OA-Good: 86.6 | 9.1 | 4.3
OA-Fair: 71.4 | 19.2 | 9.4
REGRESSION ANALYSIS
ANXIETY MODEL CONTROLLING FOR ETHNICITY AND IMMIGRATION STATUS
ANXIETY MODEL CONTROLLING FOR ETHNICITY, IMMIGRATION STATUS AND HEALTH
ANXIETY MODEL CONTROLLING FOR ETHNICITY, IMMIGRATION STATUS, HEALTH AND FAMILY TYPE
MODEL EFFECT CHANGES

Race to Health  Health to Family
CONCLUSIONS

• Race and Ethnicity Matters:

• The results consistently show that being of a specific racial or ethnic group in the United States impacts your anxiety levels and your quality of life.

• Compared to the Chinese Reference Group, other Asian ethnicities were over 2 times as likely to report high rates of anxiety. Whites and Blacks however were over 3 times as likely to report anxiety.

• Immigration status also increased anxiety but at a much lower rate
CONCLUSIONS

• Health Matters More:

• The introduction of health, fraility and risk variables greatly reduces the impact of race and ethnicity on the risk of high levels of anxiety.

• Reporting your health as Fair or Poor increases the risk 5 times while having a physical or mental limitation increases the risk 4 times. Smokers also have increased risk.

• Immigration status also increased anxiety but at a much lower rate
CONCLUSIONS

• Household Composition Also Plays a Role:

• Who you live with matters. Living Alone increases overall risk as does living in a Multigenerational Household, when compared to living in Adult Only Households but for different reasons.

• Living Alone is a higher risk for anxiety, and a growing body of literature in the US and Europe argues that living alone is a primary source of social isolation and risk of depression.

• Immigration status also increased anxiety but at a much lower rate.
CONCLUSIONS

• Your Race and Ethnicity Matters.
• Your Health Matter More.
• Avoid Social Isolation.

• In general, the risk of high rates of social anxiety have increased in the US for the 50+ population since 2006. The rate of increase among the Asian populations is lower than that seen for the US as a whole.
• Immigration status matters, but not as much as one would expect.
NACDA PROGRAM ON AGING

NACDA operates on the internet 24 hours a day, 365 days a year.

• We welcome you as researchers to use our data.
• Visit us at: www.icpsr.umich.edu/icpsrweb/NACDA
• Or Google “NACDA aging”
• Twitter @jwmcnally
THANK YOU

• You can reach me at my email:
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• Or at
  • TWITTER @jwmcnally