Interviewer Effects: Gender, Islamic Hijab, and Respondents’ Sociopolitical and Cultural Attitudes in a Nationally Representative Survey in Tunisia and Beyond

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Presentation Outline

• Previous research and theoretical framework:
  – Interviewer religious appearance and gender
  – Interviewer attitudes
• Tunisia survey:
  – Research questions
  – Data
  – Analytical models
  – Results
• Cross-national survey:
  – Research questions
  – Data
  – Analytical models
  – Results
• Limitations
• Summary and implications
• Future plans
Previous Research on Effects of Interviewer Religious Appearance and Gender

• Few studies examined the effect of interviewer religious appearance: Egypt (Blaydes & Gillum, 2013), Turkey (Koker, 2009)
  – Both studies found higher reports of religiosity to interviewers wearing religious symbols
• Many studies examined the effect of interviewer gender, but very few in the Middle East:
  – Findings overall indicate that both male and female respondents defer to their interviewer's gender on explicitly gender-related items
    See Davis et al., 2010 for review; see also Huddy et al., 1997; Kane & Macaulay, 1993
  – Benstead (2013) examined the effects of interviewer and respondent gender on responses to gender-related items and item nonresponse in Morocco:
    • Males reported more egalitarian views to female interviewers
    • Male and female respondents had less item nonresponse with male interviewers
Theoretical Framework: Effects of Interviewer Religious Appearance and Gender

• The Social Attribution Model (SAM) suggests that respondents may modify their answers to meet the norms and expectations they perceive are held by the interviewer (Johnson and Parsons 1994).

• This is based around generalizations formed by the respondent based on interviewer characteristics such as gender, age, race, and veil status.

• SAM predicts a direct effect that all respondents will respond in the direction predicted by the interviewer’s observable characteristics:
  – All respondents will report greater religiosity to veiled interviewers.
  – All respondents will report more secular views to non-veiled female interviewers or to males.
Previous Research on Effects of Interviewer Attitudes & Theoretical Framework

Previous research examining interviewer attitudes

• Interviewer attitudes towards persuading reluctant respondents on cooperation rates (Durrant, Groves, Staetsky, & Steele, 2010; Jäckle, Lynn, Sinibaldi, & Tipping, 2013)
• Interviewer attitudes about the respondent’s interest (Olson & Peytchev, 2007)
• Interviewers’ partisan attitudes on respondent attitudes (Healy and Malhotra 2014)

Theoretical framework

• Extending SAM, we predict a direct effect that all respondents will respond in the direction predicted by the interviewer’s non-observable characteristics
• Interviewers may project their attitudes to respondents through both verbal cues and non-verbal cues such as body language or other subtle cues
• Respondents may defer to perceived interviewer attitudes
  – Respondents will report greater endorsement of secular politics when his/her interviewer also endorses secular politics
Research Questions: Tunisia

- Does interviewer gender and outward measures of religiosity (female veil) affect respondents’ reported religious attitudes?
- Does an interviewer’s own attitude affect respondents’ reported religious attitudes?
Data and Methods: Tunisia

- Nationally representative, stratified multi-stage probability sample
- 3,070 completed interviews
- Partial interpenetration of interviewer assignment (i=46)
- 78% response rate
- 250 items on political/religious attitudes
- Interviewer self-completed questionnaire
Analytical models: Tunisia

- Dependent variables:
  - Endorsement of secular politics and politicians
  - Index of liberalism
  - Levels of religious intolerance, religiosity, rating of importance of God
  - Mosque attendance and frequency of prayer
  - Individual and communal Islamic identity
  - Preference for no veil
  - Approval of religiously-motivated political violence

- Independent variables:
  - Respondent:
    - Age, education, gender, social class, urban/rural area
  - Interviewer:
    - Age, education, gender/veil status, work experience, interviewer’s own attitude
Analytical models:
Tunisia

Weighted linear and binomial multilevel regression models (SAS: GLIMMIX)

• Level 1: Respondents
• Level 2: Interviewers
• Level 3: PSU
## Linear Multilevel Regression Models

<table>
<thead>
<tr>
<th></th>
<th>Endorsement of Secular Politics</th>
<th>Endorsement of Secular Politicians</th>
<th>Liberalism Index</th>
<th>Religious Intolerance Index</th>
<th>Self-Described Religiosity</th>
<th>Approval of Political Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Exp High</td>
<td>0.037</td>
<td>0.039</td>
<td>0.023</td>
<td>-0.137</td>
<td>0.413</td>
<td>-0.178</td>
</tr>
<tr>
<td>I Exp Low</td>
<td>0.073</td>
<td>0.166</td>
<td>0.080</td>
<td>-0.277</td>
<td>0.021</td>
<td>0.477</td>
</tr>
<tr>
<td>I Education</td>
<td>0.081</td>
<td>0.096</td>
<td>0.080</td>
<td>-0.167</td>
<td>-0.322</td>
<td>0.296</td>
</tr>
<tr>
<td>I Fem No Veil</td>
<td>0.110</td>
<td>0.139</td>
<td>0.106</td>
<td>-0.098</td>
<td>-0.077</td>
<td>0.112</td>
</tr>
<tr>
<td>I Male</td>
<td>0.038</td>
<td>0.005</td>
<td>-0.005</td>
<td>-0.022</td>
<td>0.040</td>
<td>0.232</td>
</tr>
<tr>
<td>I Age</td>
<td>0.017</td>
<td>0.026</td>
<td>0.015</td>
<td>-0.019</td>
<td>0.093</td>
<td>0.009</td>
</tr>
<tr>
<td>I Attitude</td>
<td><strong>0.149</strong></td>
<td><strong>0.120</strong></td>
<td><strong>0.157</strong></td>
<td><strong>0.257</strong></td>
<td><strong>0.142</strong></td>
<td><strong>0.195</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Endorsement of Secular Politics</th>
<th>Endorsement of Secular Politicians</th>
<th>Liberalism Index</th>
<th>Religious Intolerance Index</th>
<th>Self-Described Religiosity</th>
<th>Approval of Political Violence</th>
</tr>
</thead>
</table>

| Interviewer ICCs     | 0.027                           | 0.017                             | 0.015            | 0.037                       | 0.025                       | 0.061                         |

| Reduction in ICC due to I demographics | 0% | 12% | 29% | 11% | 16% | 3% |
| Reduction in ICC due to I demographics/attitudes | 7% | 32% | 51% | 35% | 23% | 15% |

*Models also included respondent age, gender, education, class, and urban/rural area
# Binomial Multilevel Regression Models

<table>
<thead>
<tr>
<th></th>
<th>Importance of God</th>
<th>Personal Islamic Identity</th>
<th>Communal Islamic Identity</th>
<th>Preference for no veil</th>
<th>Mosque attendance</th>
<th>Frequency of prayer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Exp High</td>
<td>0.069</td>
<td>-0.064</td>
<td>0.023</td>
<td>0.391</td>
<td>-0.010</td>
<td>-0.270</td>
</tr>
<tr>
<td>I Exp Low</td>
<td>-2.084</td>
<td>0.468</td>
<td>0.320</td>
<td>1.633</td>
<td>-0.140</td>
<td>-0.170</td>
</tr>
<tr>
<td>I Education</td>
<td>-1.532</td>
<td>0.224</td>
<td>0.150</td>
<td>0.494</td>
<td>-0.648</td>
<td>-0.327</td>
</tr>
<tr>
<td>I Fem No Veil</td>
<td><strong>-2.971</strong></td>
<td>-0.284</td>
<td>0.164</td>
<td>0.624</td>
<td>-0.490</td>
<td>-0.896</td>
</tr>
<tr>
<td>I Male</td>
<td><strong>-2.111</strong></td>
<td>-0.408</td>
<td>-0.245</td>
<td>0.390</td>
<td>-0.077</td>
<td>-0.301</td>
</tr>
<tr>
<td>I Age</td>
<td>-0.050</td>
<td><strong>0.098</strong></td>
<td>-0.038</td>
<td>-0.019</td>
<td>-0.004</td>
<td>-0.081</td>
</tr>
<tr>
<td>I Attitude</td>
<td><strong>2.428</strong></td>
<td><strong>0.464</strong></td>
<td><strong>0.504</strong></td>
<td>-0.171</td>
<td>0.232</td>
<td>0.233</td>
</tr>
</tbody>
</table>

**Introducer ICC**

<table>
<thead>
<tr>
<th></th>
<th>Interviewer ICC</th>
<th>Reduction in ICC due to I demographics</th>
<th>Reduction in ICC due to I demographics/attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.635</td>
<td>0.210</td>
<td>0.222</td>
</tr>
<tr>
<td>Preference for no veil</td>
<td>0.379</td>
<td>0.234</td>
<td>0.431</td>
</tr>
<tr>
<td>Mosque attendance</td>
<td>7%</td>
<td>3%</td>
<td>-7%</td>
</tr>
<tr>
<td>Frequency of prayer</td>
<td>6%</td>
<td>3%</td>
<td>-4%</td>
</tr>
</tbody>
</table>

*Models also included respondent age, gender, education, class, and urban/rural area
Non-Religious Outcomes

• Examined several variables not associated with religion for interviewer effects
  – Respondent age
  – Respondent number of children
  – Hours watching TV
  – Reliance on TV as source of information
• No significant interviewer effects
Cross-National Survey Data
Research Questions: Cross-National Survey

- Does the magnitude of interviewer effect vary across countries and across question topics?
- Do interviewer gender and outward measures of religiosity (female veil) explain any interviewer effects, and is there a pattern across countries and across topics?
## Data and Methods: Cross-National Survey

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample size</th>
<th>Survey dates</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>3,143</td>
<td>June - Aug 2011</td>
<td>93%</td>
</tr>
<tr>
<td>Iraq</td>
<td>3,000</td>
<td>Jan - Feb 2011</td>
<td>88%</td>
</tr>
<tr>
<td>Lebanon</td>
<td>3,034</td>
<td>March - July 2011</td>
<td>61%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3,523</td>
<td>May - Sept 2011</td>
<td>83%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>2,005</td>
<td>Jan - Feb 2011</td>
<td>73%</td>
</tr>
<tr>
<td>Tunisia</td>
<td>3,070</td>
<td>March - May 2013</td>
<td>78%</td>
</tr>
<tr>
<td>Turkey</td>
<td>3,019</td>
<td>April - June 2013</td>
<td>62%</td>
</tr>
</tbody>
</table>
Data and Methods: Cross-National Survey

- Nationally representative, stratified multi-stage probability samples
- Partial interpenetration interviewer assignment varies by country
- Face-to-face interviews
- 250 items on political/religious attitudes
  - Questionnaire items identical in all countries
- Interviewer demographics collected
Analytical models: Cross-National Data

• Dependent variable topics:
  • Levels of religious intolerance, religiosity, rating of importance of God, confidence in mosque
  • Endorsement of gender equality, social individualism, and gender segregation
  • Individual and communal Islamic identity
  • Endorsement of secular politics and politicians
  • Approval of religiously motivated political violence

• Independent variables:
  • Respondent:
    • Age, SES, gender, urban/rural area, religion
  • Interviewer:
    • Age, education, gender/veil status

• Model:
  • Weighted multilevel linear and binomial regression models
  • Respondents (level 1), interviewers (level 2)
Interviewer Intraclass Correlation Coefficients: Religiosity
Interviewer Intraclass Correlation Coefficients:
Gender

- Egypt
- Iraq
- Lebanon
- Tunisia
- Turkey

- Gender equality
- Social individualism
- Gender segregation
Interview Intraclass Correlation Coefficients: Secular Politics

- Egypt
- Iraq
- Lebanon
- Tunisia
- Turkey

Correlation coefficients for different categories:
- Secular politics
- Secular politicians
- Secular politics (fc)
- Secular politicians (fc)
- Political violence

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Cross-National Survey: Direct Interviewer Effects

Do interviewer gender and outward measures of religiosity (female veil) explain any interviewer effects?

<table>
<thead>
<tr>
<th>Effect of male interviewers on all respondents</th>
<th>Egypt</th>
<th>Iraq</th>
<th>Lebanon</th>
<th>Tunisia</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosque attendance</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Confidence in Mosque</td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Social individualism</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect of veiled interviewers on female respondents</th>
<th>Iraq</th>
<th>Lebanon</th>
<th>Tunisia</th>
<th>Turkey</th>
<th>KSA</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-described religiosity</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Endorsement of secular politics</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Approval of political violence</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Preference for no veil</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Limitations

• Interviewer questionnaires completed in Tunisia at the end of the field period
• Little variance in some interviewer demographics
• Unlike females, no variation in appearance of male interviewer religiosity
• No full interpenetration of interviewers
• Design differences limited some comparative analyses in cross-national surveys
Discussion

Tunisia survey
• Interviewer attitudes appear to be strongly associated with respondent attitudes, much more so than gender and veil
• There is no direct effect of interviewer behavior on respondent behavior

Cross-national survey
• There is large variation in ICCs, with Iraq and Egypt differing sharply from Tunisia and Lebanon
• Interviewer ICCs are generally not explained by interviewer veil or interviewer gender, corroborating findings in Tunisia
Implications

• Differences in ICCs across countries can have significant impact on design effects and effective sample size and it is crucial to have a better understanding of the causes and take steps to reduce the ICCs in future studies.

• Increase interviewers’ awareness and understanding of interviewer effects, especially when collecting sensitive attitudinal measures.

• Consider interviewer/respondent matching on measures other than gender/race if large interviewer effects are suspected.

• Collect more interviewer characteristics and measures that are related to key outcomes.
Future Plans

Analyses

• Replicate models to examine effect of interviewer attitudes and behavior in Turkey
• Examine respondent/interviewer gender interactions to explore social distance theory

Innovations in study design

• Interviewer observed objective measures of respondent religiosity
• Interviewer self-completion of questionnaire both before and after field period
• Interviewer attitudes toward the survey topic
References


Thank you!