



# **The Influence of Government Programs on the Fertility of the Poor: a comparison between Brazil and Mexico**

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## **MOTIVATION OF THIS EXERCISE**

- **A recent controversy in the Brazilian press**
- **Previous work with Brazilian census data**
- **2000 censuses have a lot in common:**
  - **10% samples**
  - **date of last live birth**
  - **other household and individual variables**

**DRAUZIO VARELLA**  
**Folha de São Paulo**  
**Newspaper, August 23, 2003**



- **One of Brazil's most pressing problems is the high fertility rate among the poor.**
- **Even in such a modern age as ours in which effective contraception methods are available, there are still a huge number of undesired pregnancies among the poor.**
- **Why do policy-makers keep avoiding this issue?**

**MARIA JOSÉ DE OLIVEIRA ARAÚJO**  
**Coordinator of Woman's Health**  
**Brazilian Ministry of Health**



- **In the last 20 years, Brazil was one of the countries whose fertility rates fell most rapidly, based on census data.**
- **On the other hand, poverty is still a reality; social exclusion is still out there; misery is still out there.**
- **So, I believe it is a grave contradiction that social sectors re-start the debate over poverty, social exclusion and violence as an issue that requires fertility control.**

# **PRESIDENT LULA**

**From his speech, March 2003**



- **I went to poor villages in Piauí state with government secretaries.**
- **It was common to find homes with women under 21 years of age, who had two, three or more children, and were without a husband.**
- **How can we solve such a serious problem?**
- **It's a cultural problem. These young ladies most likely have not had any sexual education during their childhood, teenage years, and even adult years.**



# DIFFERENT FAMILY PLANNING AND REPRODUCTIVE HEALTH SERVICES AND POLICIES

## MEXICO

Programs of SSA, IMSS and IMSS-Solidaridad for both insured and uninsured with promotion of IUD and Female Sterilization. Postpartum, but also via clinics.

## BRAZIL

Much less emphasis on the supply of methods, restrictions on female sterilization, especially postpartum, frustrated demand, abortion, and exchange of sterilization for votes.



## PREVIOUS STUDIES

### MEXICO

The use of female sterilization and the IUD in a community is strongly associated with the proportion of births taking place in public hospitals.

### BRAZIL

The TFR in a municipality is well predicted by the degree of electrification and the average level of women's education.



## **MAIN QUESTION**

- **Within a municipality, will fertility differentials by economic and social status be smaller in Mexico than in Brazil?**
- **So long as the demand for children is approximately equal between the very poor and the not so poor in both countries.**



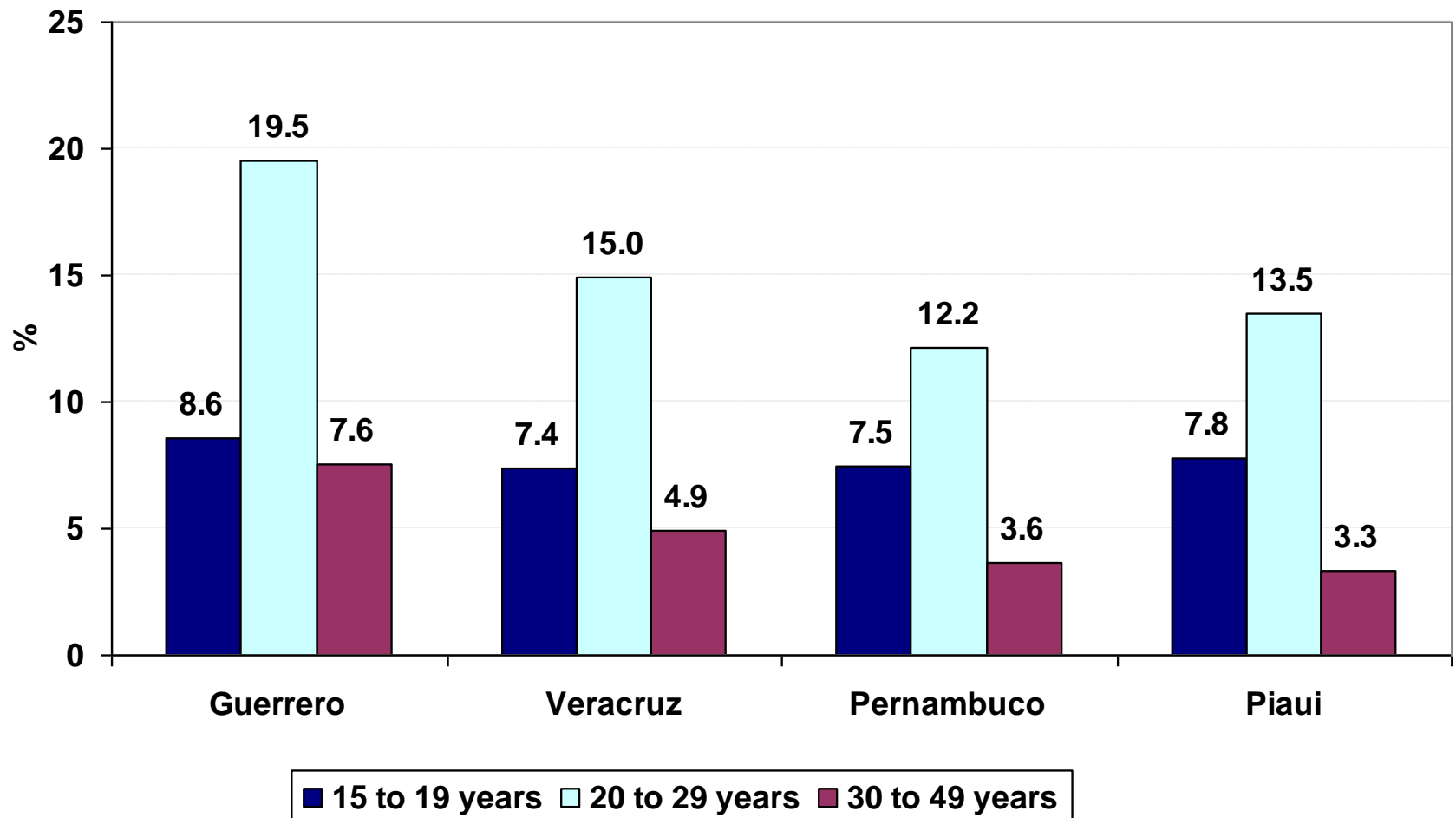
# DATA



- **2000 Censuses, 10% (15%) of four states: Piauí, Pernambuco, Guerrero and Veracruz, using individual data on date of last live birth.**
- **Four categories of educational attainment: 0-2, 3-6, 7-9, and 10+ years.**
- **Municipal development factor based on the percentage of households with electricity, refrigerators, and TV.**
- **Data on fertility desires from 1996 DHS and 1997 ENADID.**

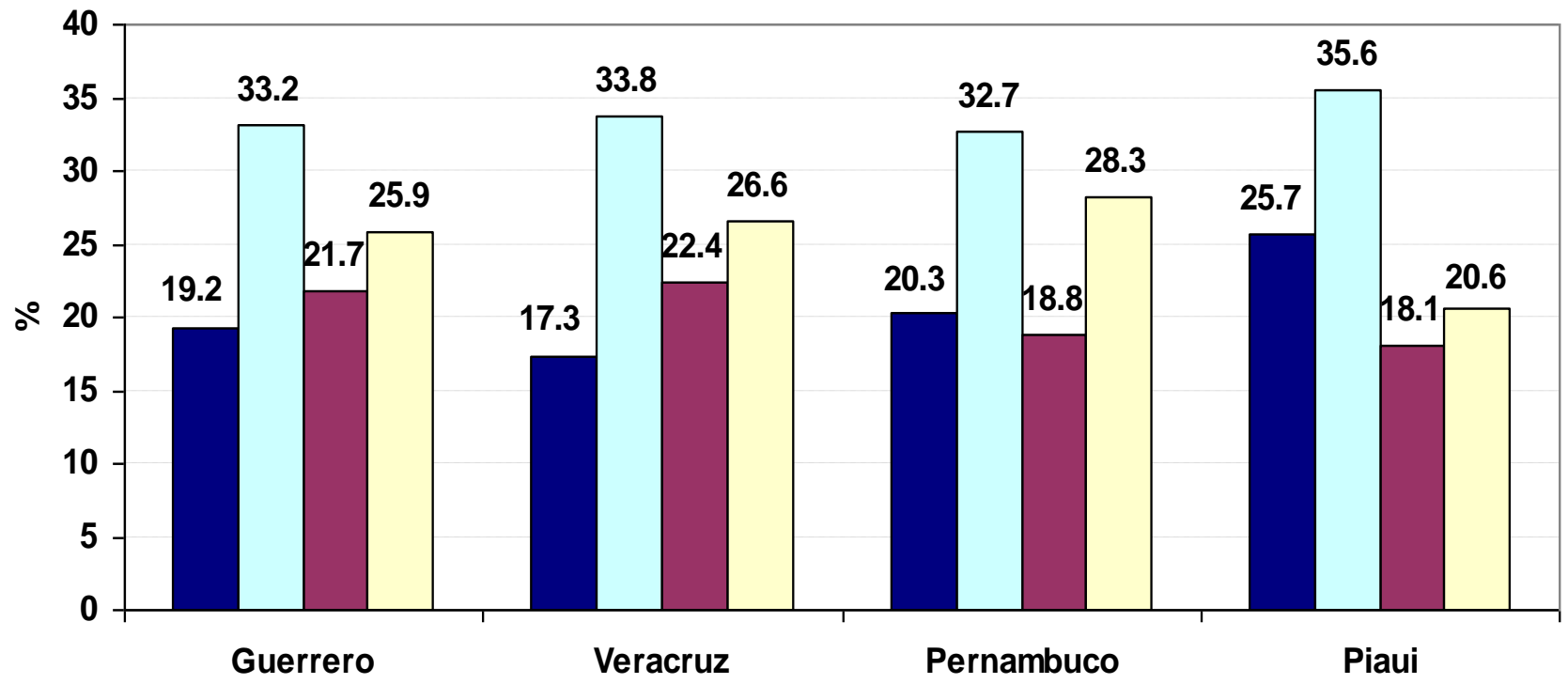


### PERCENT OF WOMEN WITH CHILD BORN ALIVE LAST YEAR IN THE POPULATION OF BRAZILIAN AND MEXICAN STATES, 2000





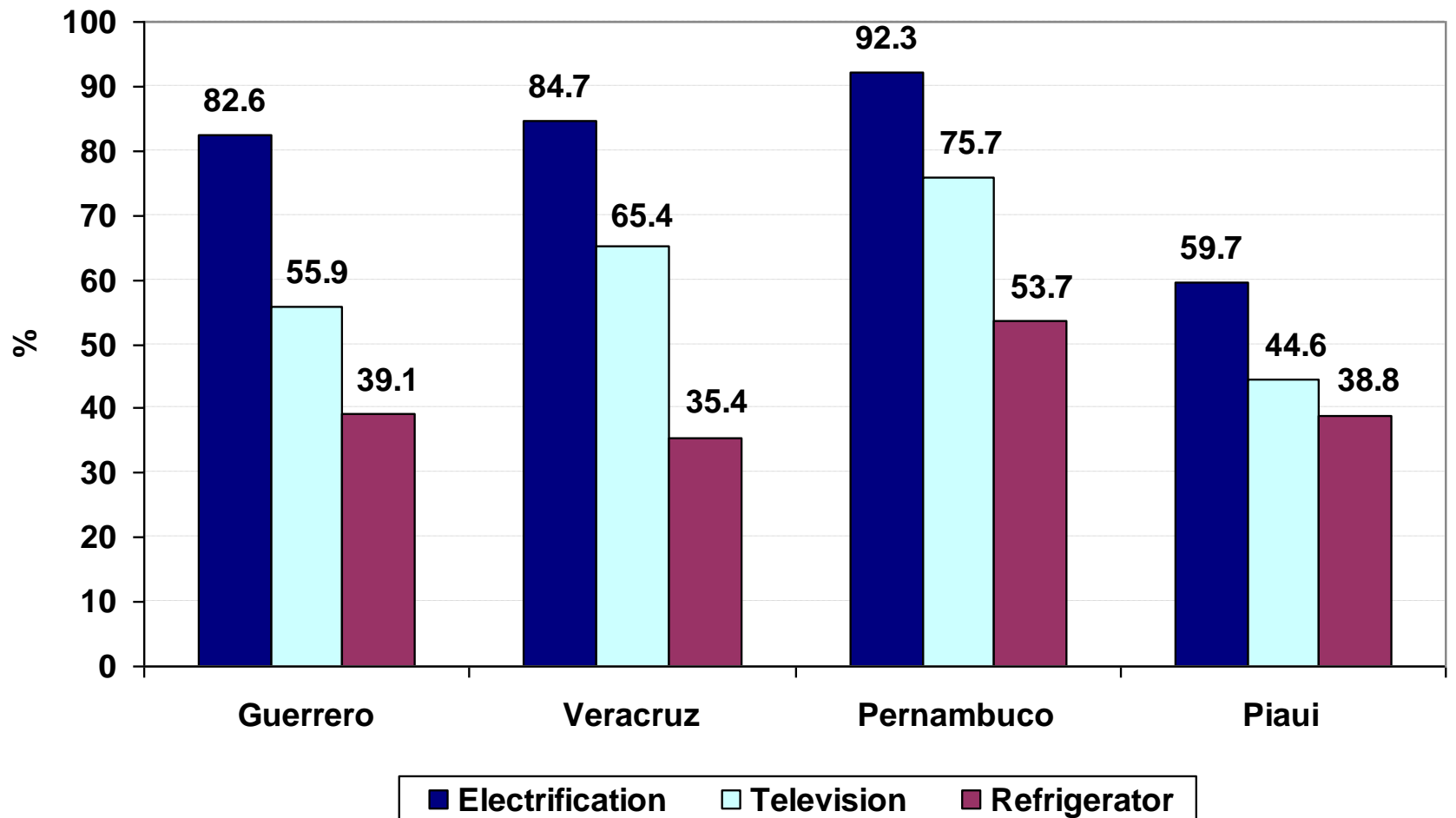
### PERCENT OF YEARS OF SCHOOLING GROUPS IN THE POPULATION OF BRAZILIAN AND MEXICAN STATES, 2000



■ 0 to 2 years/school ■ 3 to 6 years/school ■ 7 to 9 years/school ■ 10 years/school or more

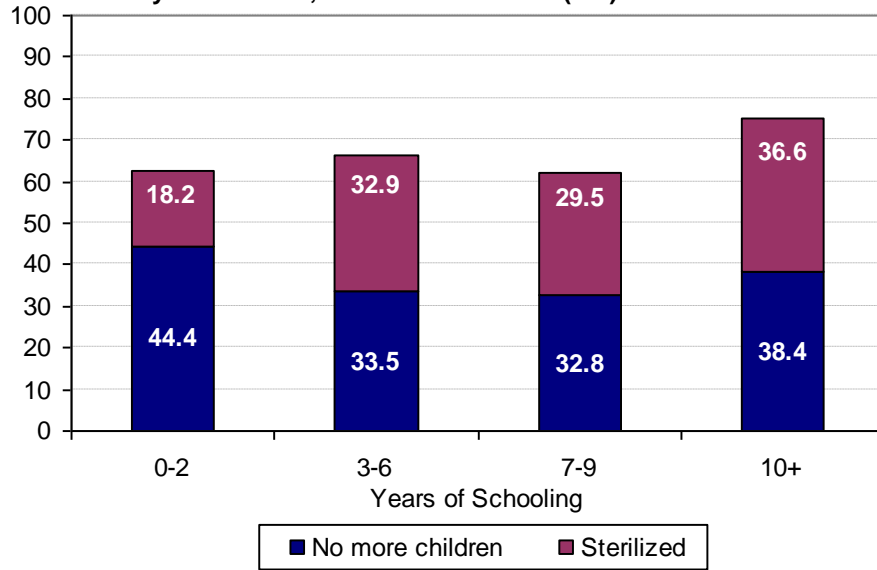


### PERCENT OF HOUSEHOLDS WITH SPECIFIC INFRASTRUCTURE IN THE POPULATION OF BRAZILIAN AND MEXICAN STATES, 2000

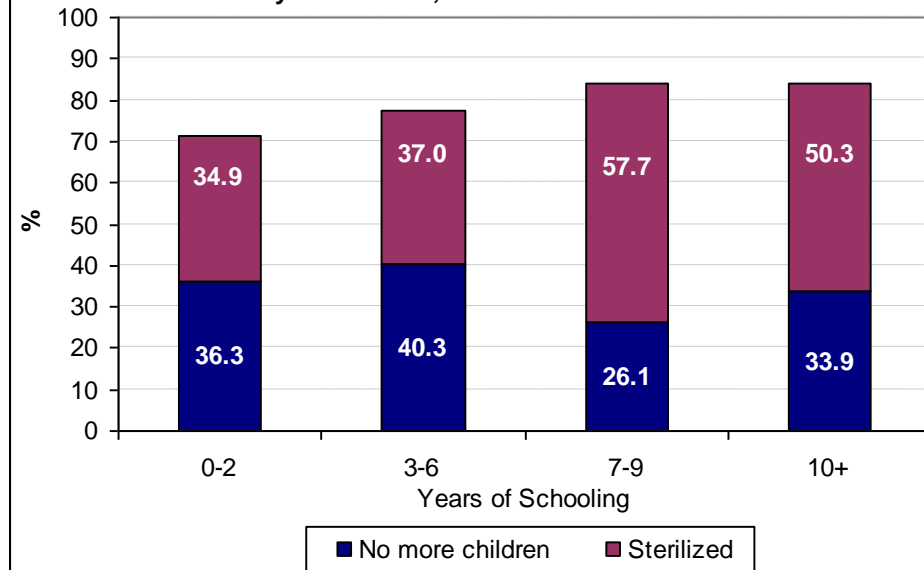




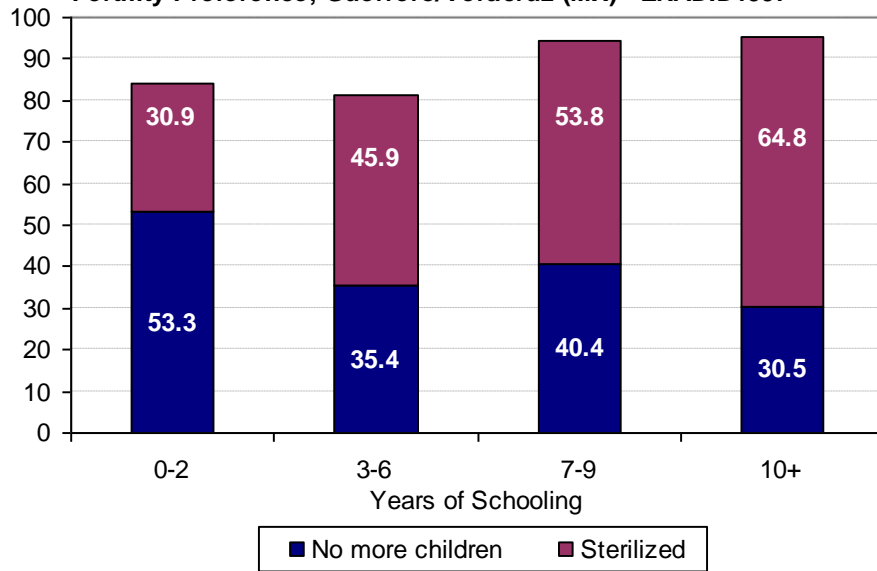
**Women with Recoded Parity "2" by Years of Schooling and Fertility Preference, Guerrero/Veracruz (MX) - ENADID1997**



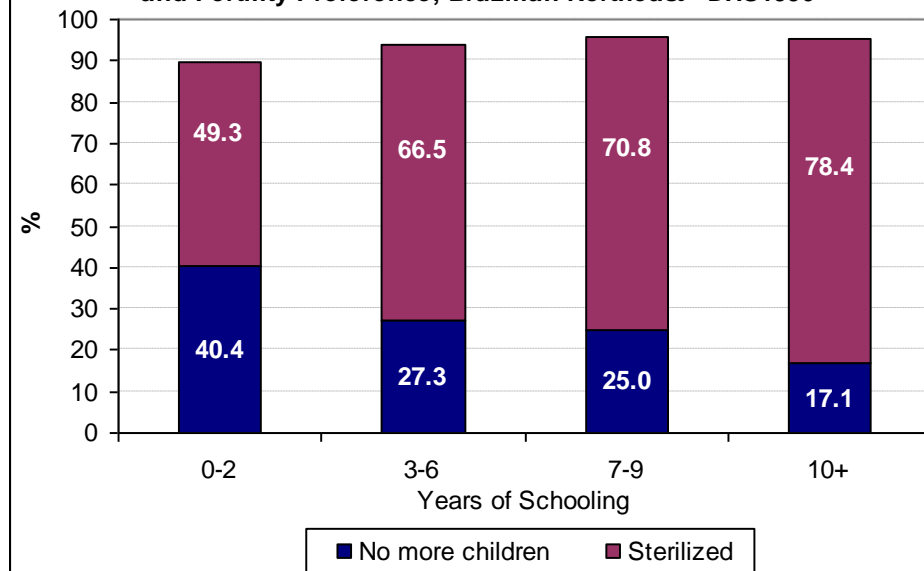
**Women with Recoded Parity "2" by Years of Schooling and Fertility Preference, Brazilian Northeast - DHS1996**

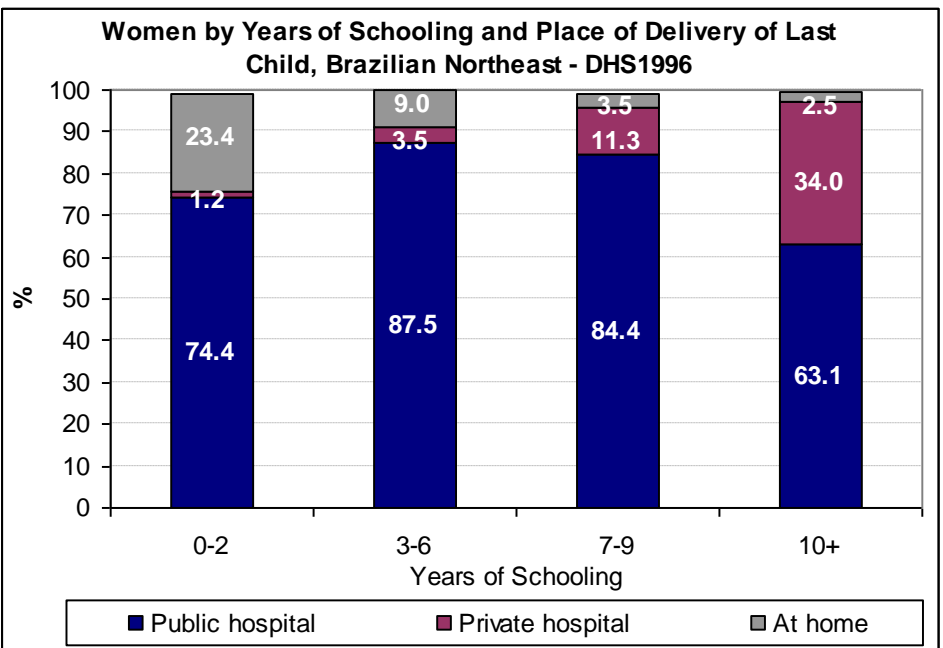
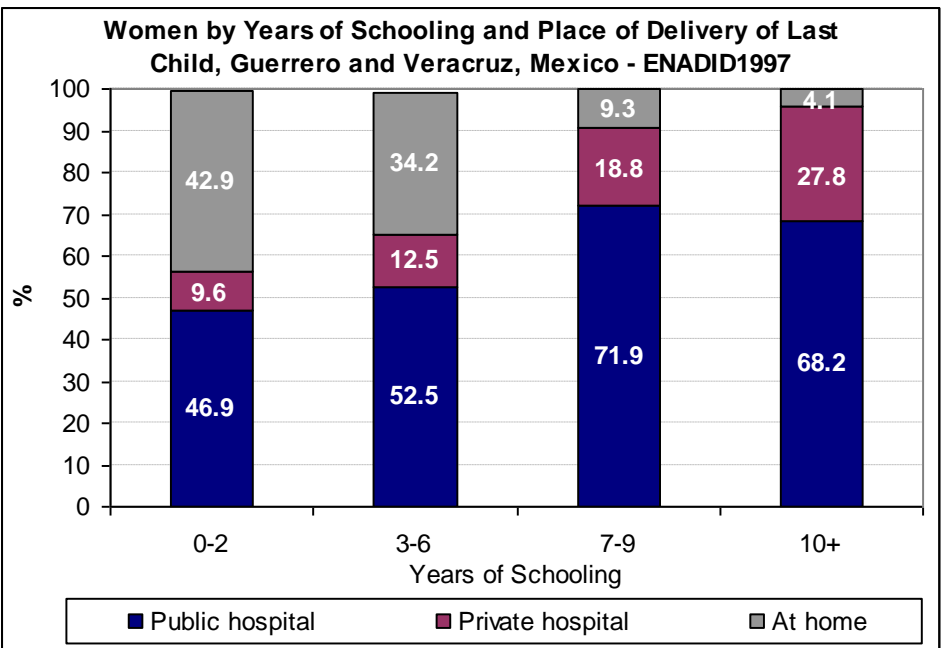


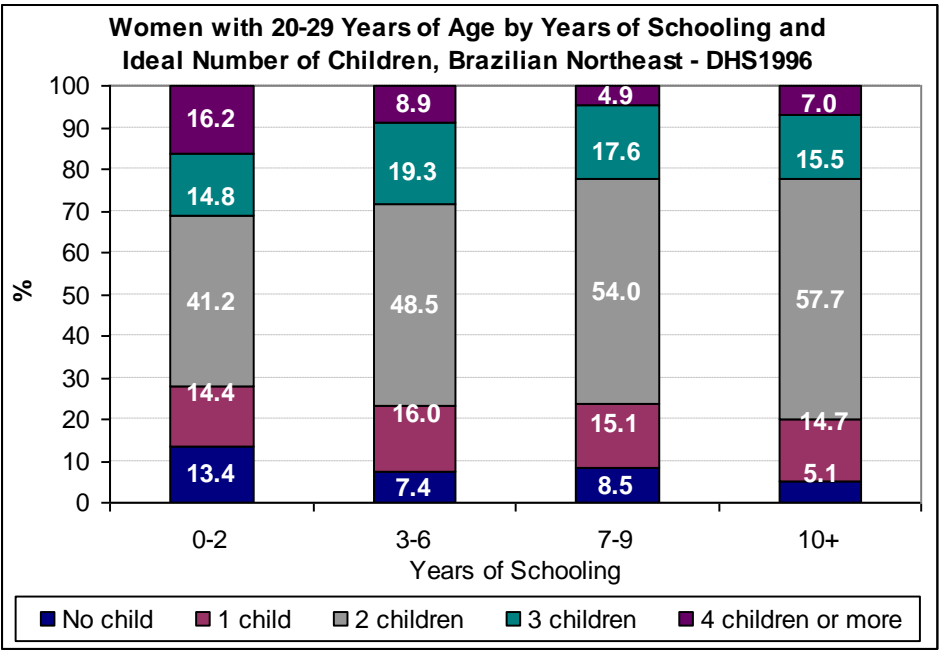
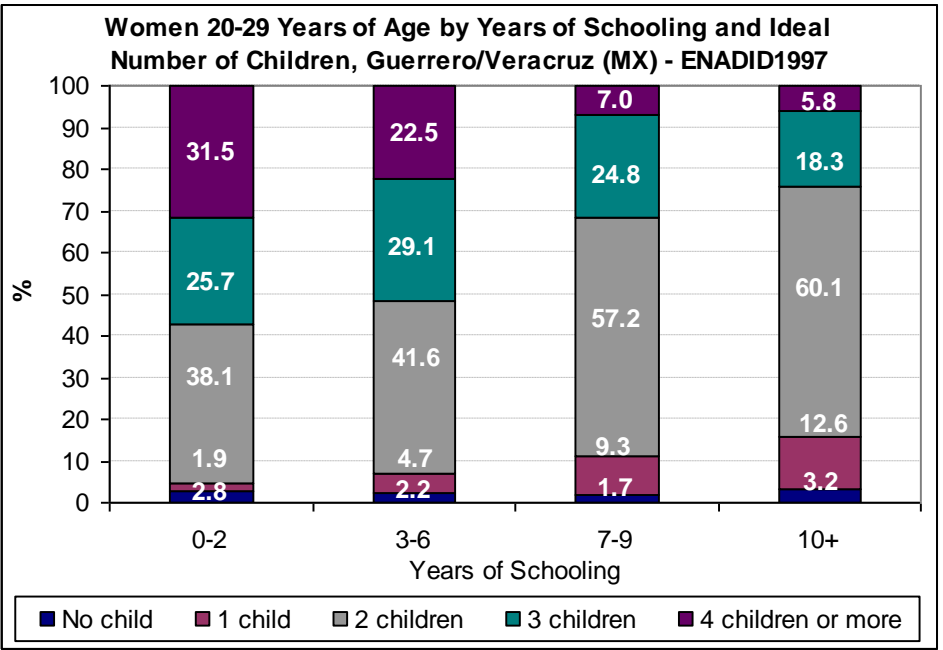
**Women with Recoded Parity "3" by Years of Schooling and Fertility Preference, Guerrero/Veracruz (MX) - ENADID1997**



**Women with Recoded Parity "3" by Years of Schooling and Fertility Preference, Brazilian Northeast - DHS1996**

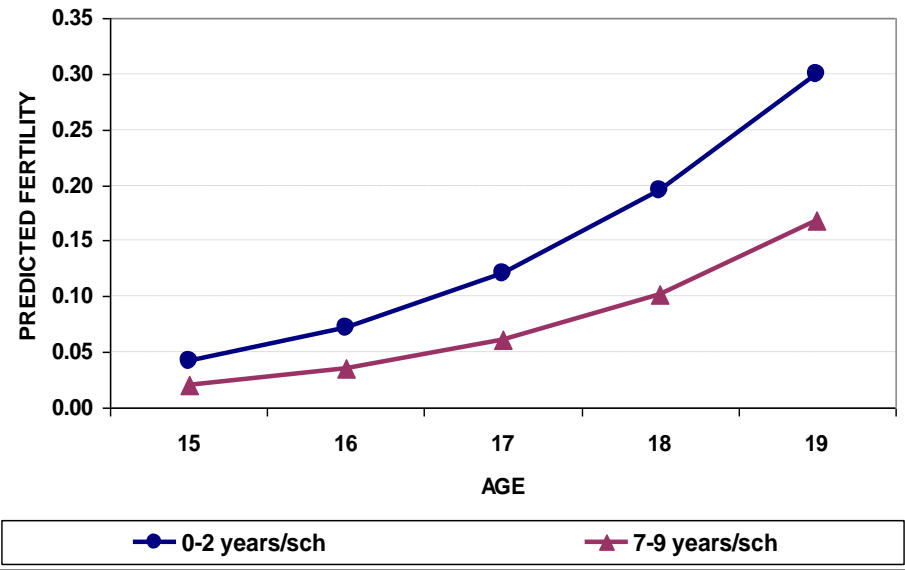




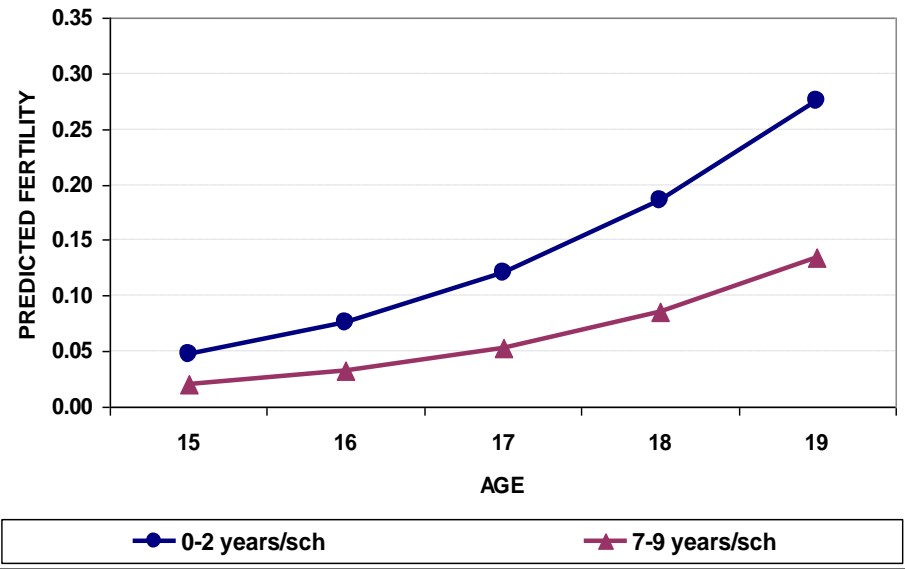




PREDICTED FERTILITY BY AGE AND YEARS OF SCHOOLING  
GUERRERO-MEXICO, 2000



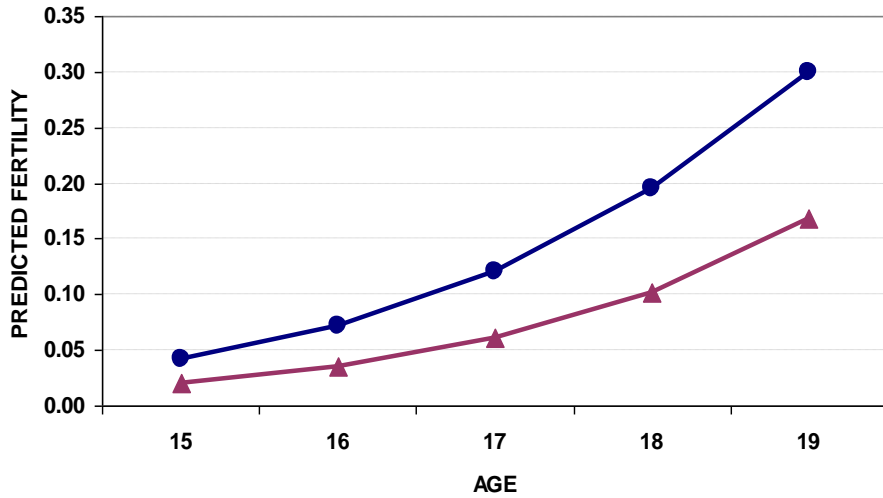
PREDICTED FERTILITY BY AGE AND YEARS OF SCHOOLING  
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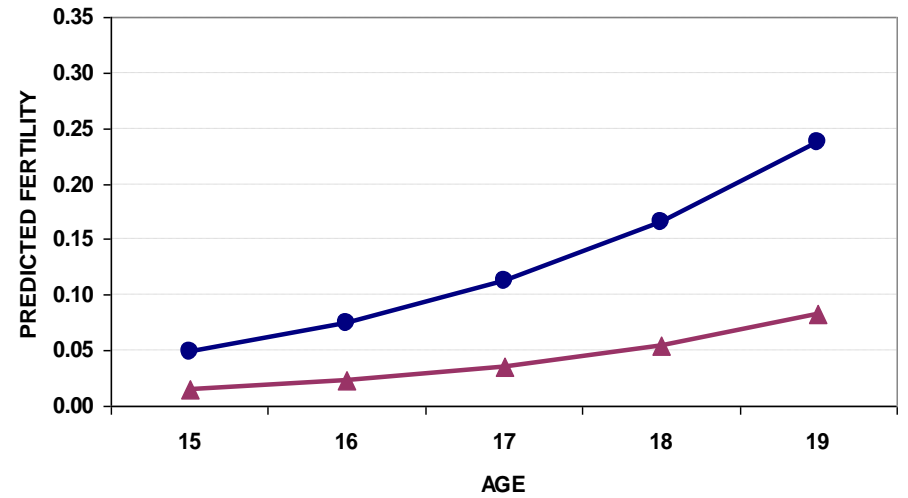


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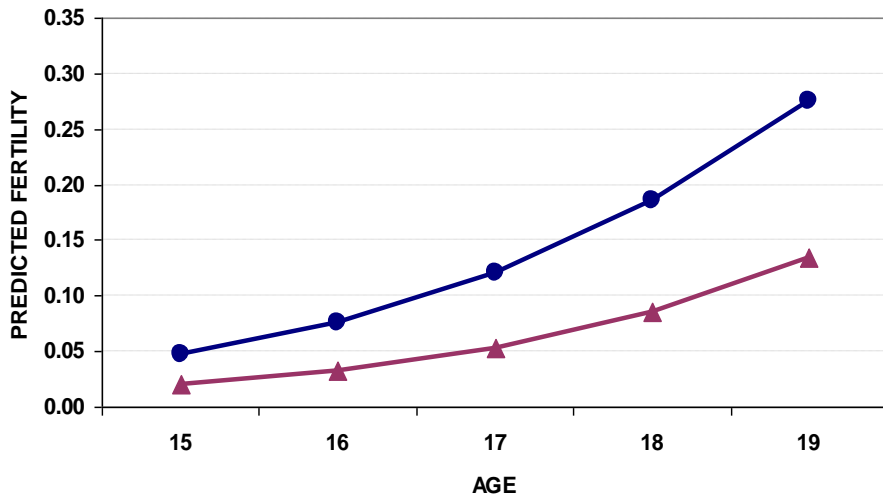
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PREDICTED FERTILITY BY AGE AND YEARS OF SCHOOLING  
PERNAMBUCO-BRAZIL, 2000



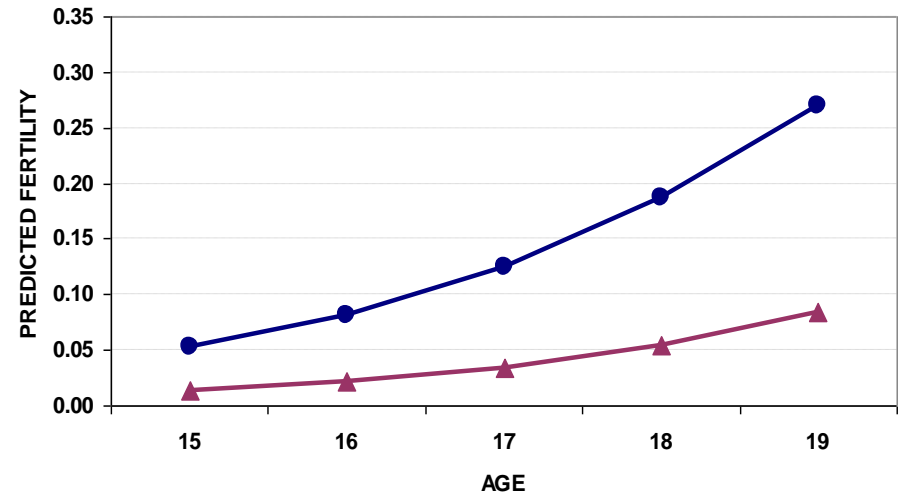
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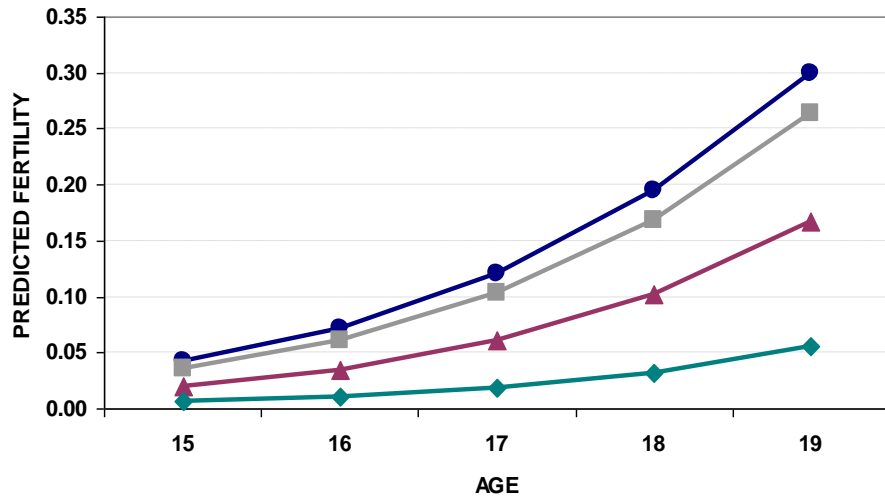
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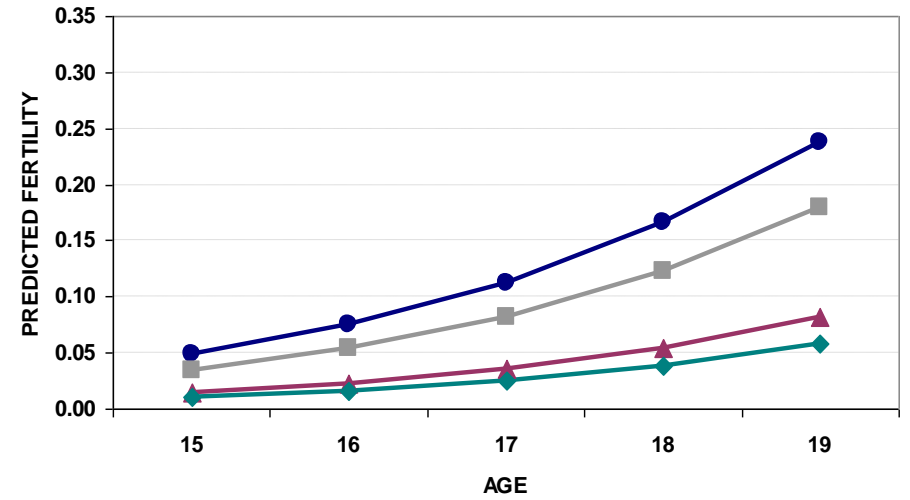
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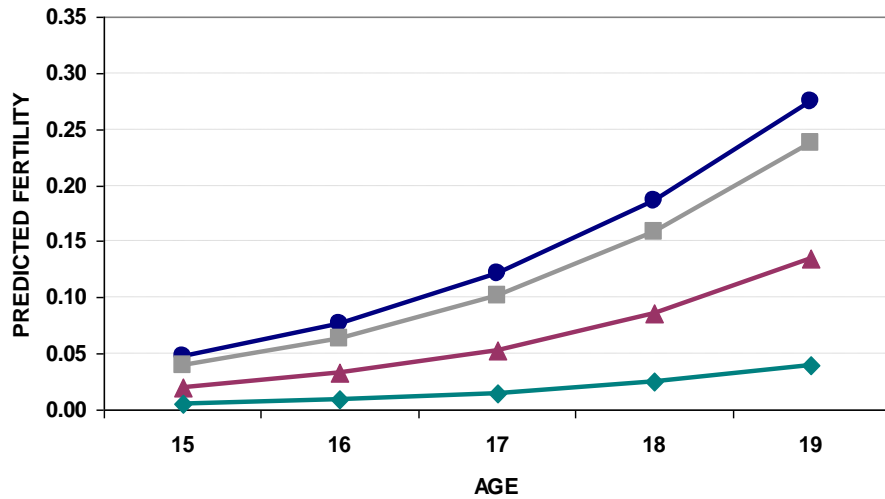
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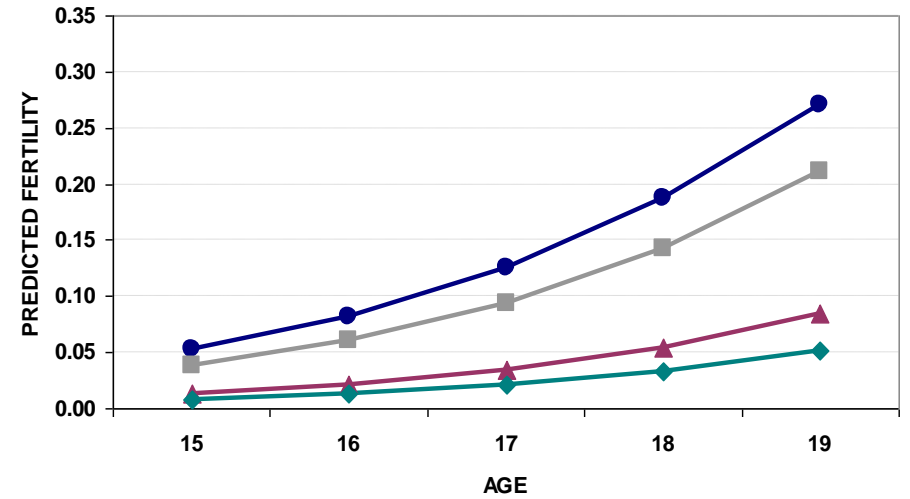
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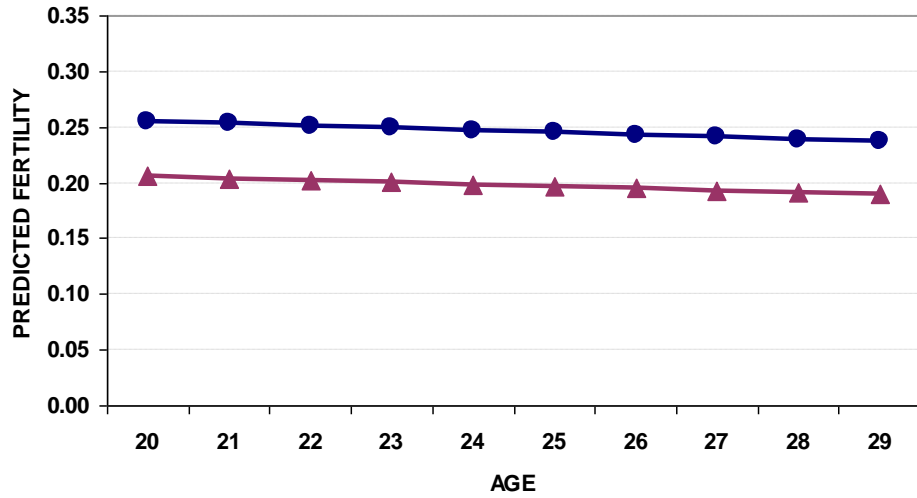


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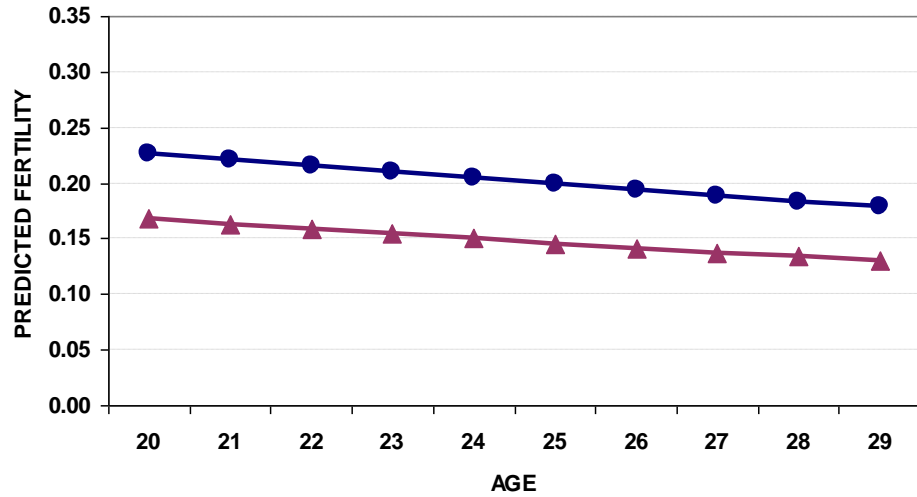
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7-9 years/sch

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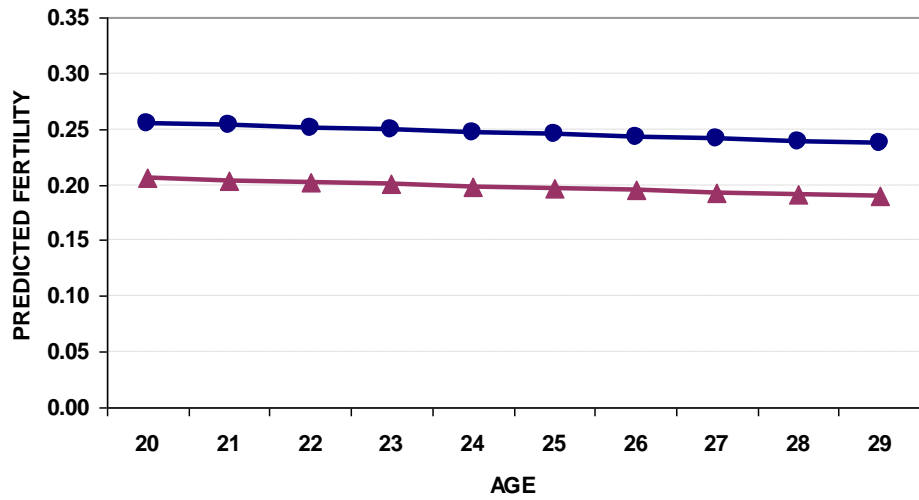


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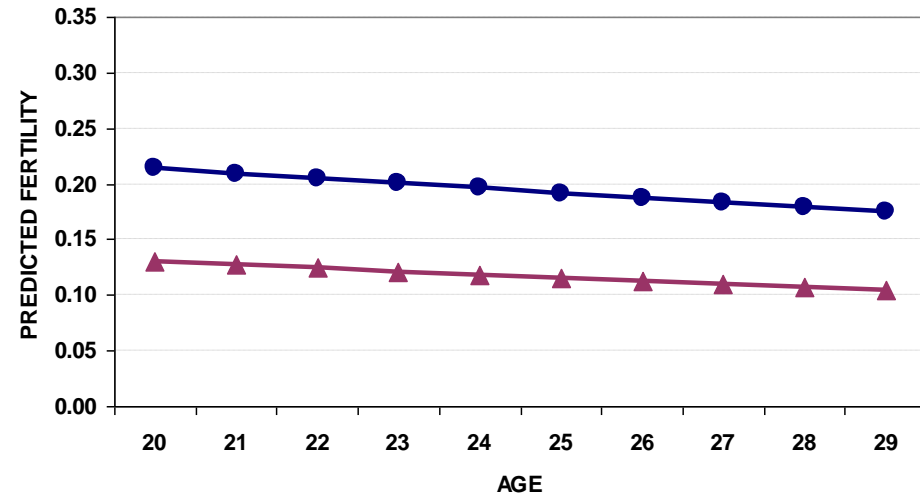


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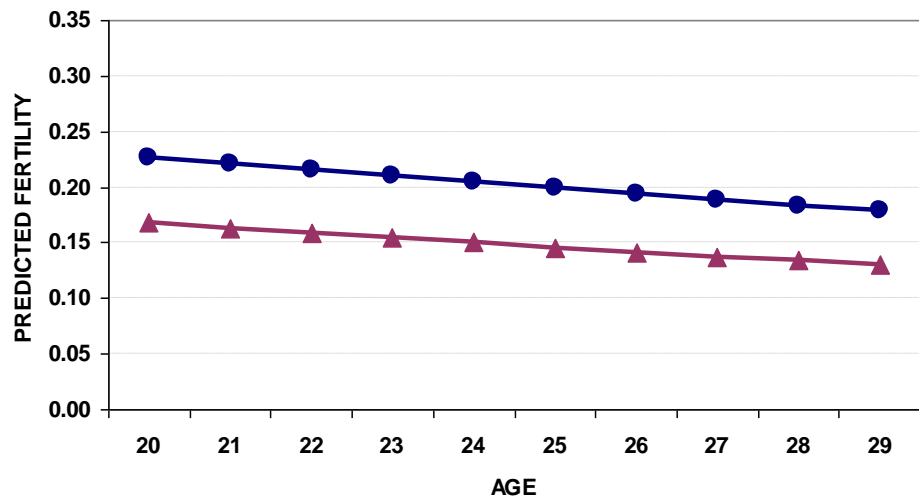
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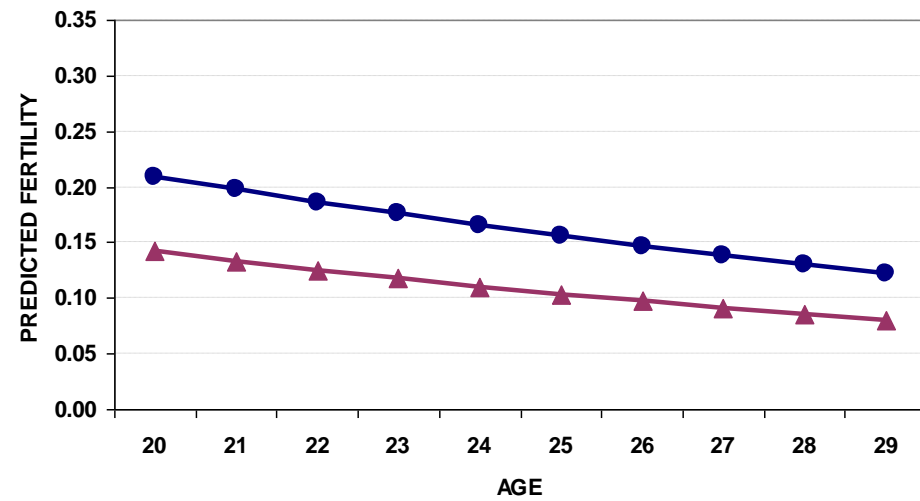
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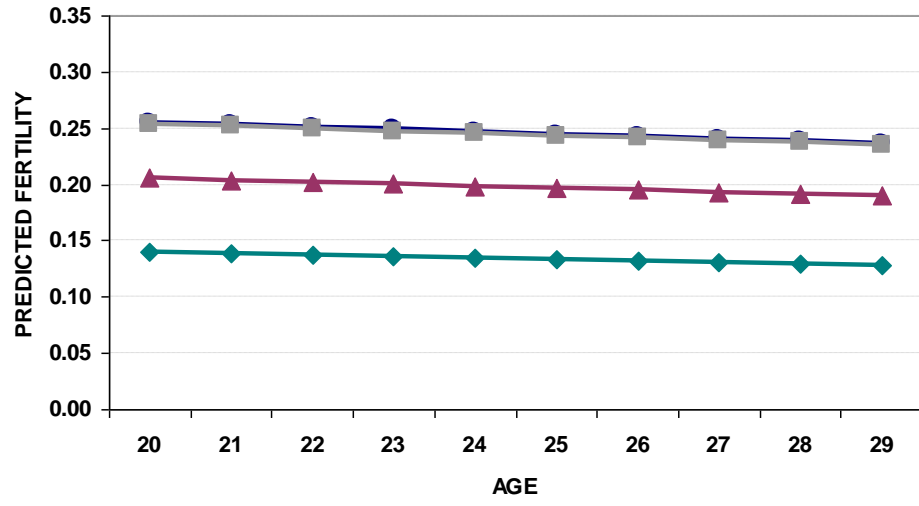
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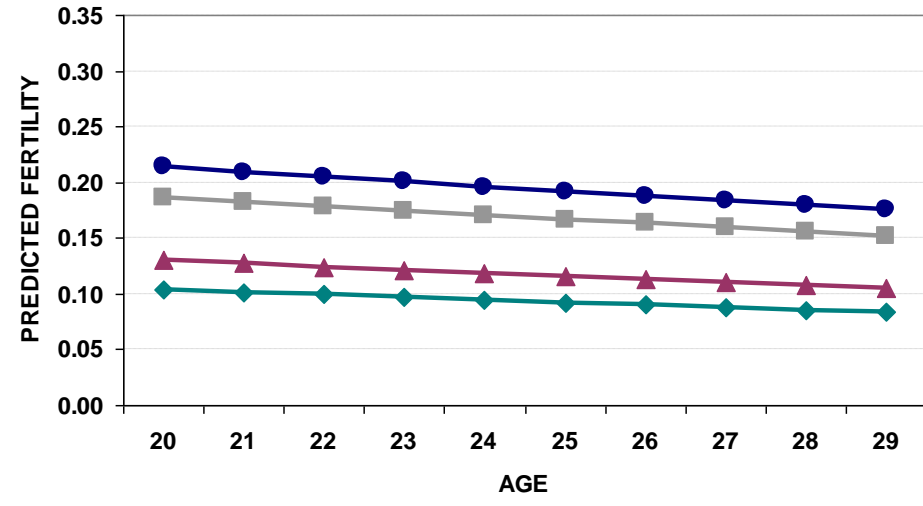
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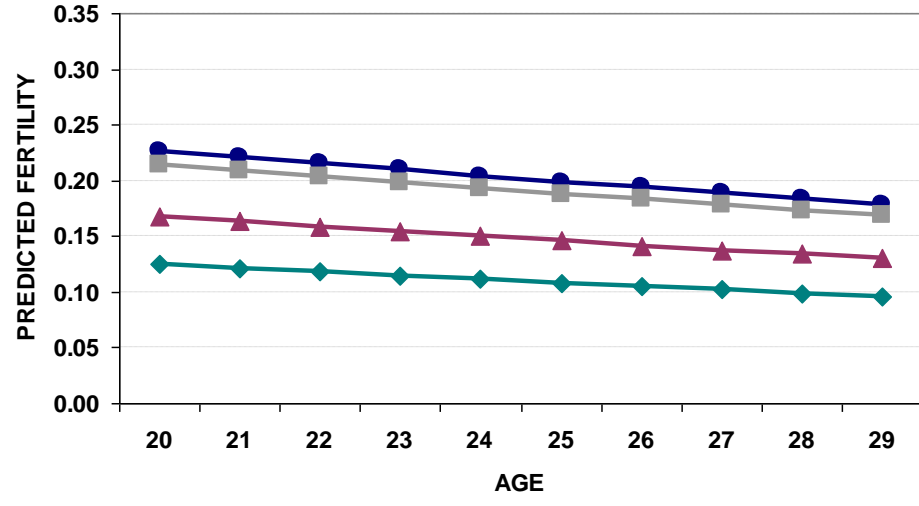
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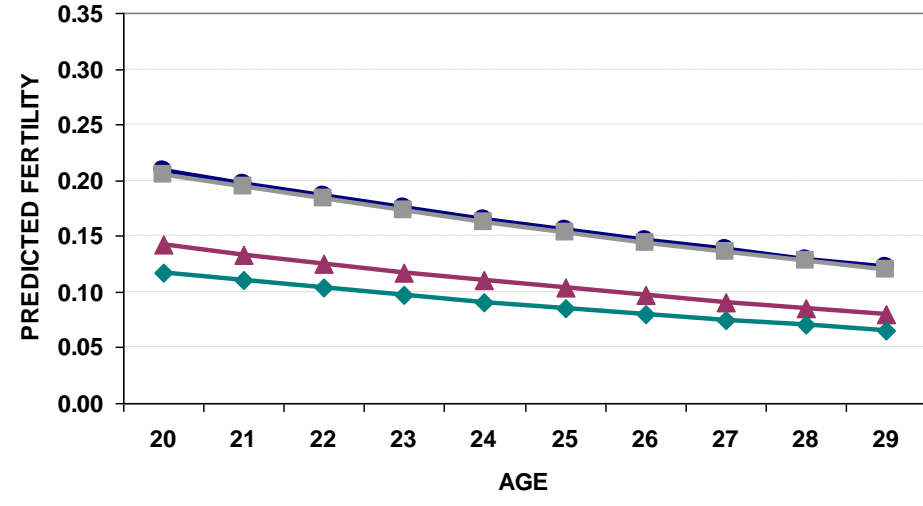
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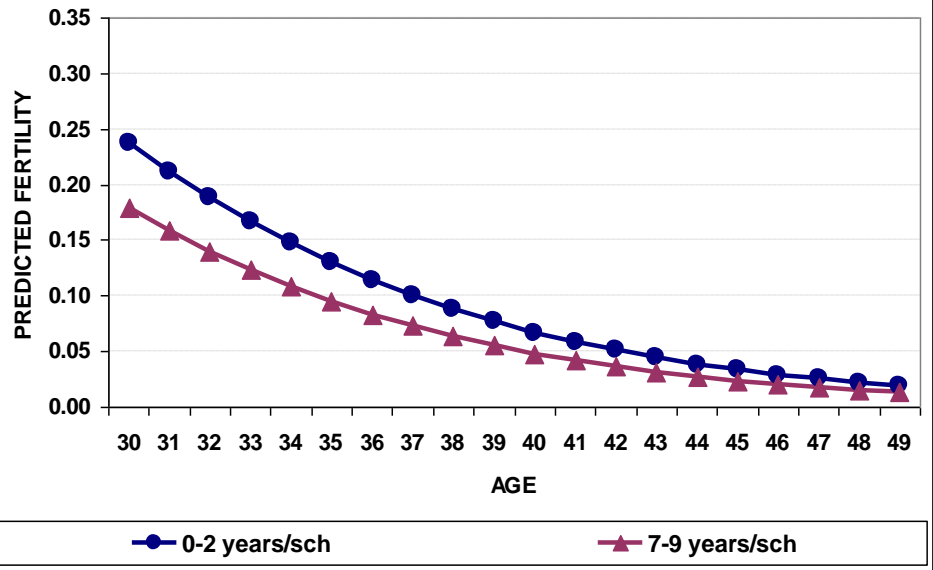


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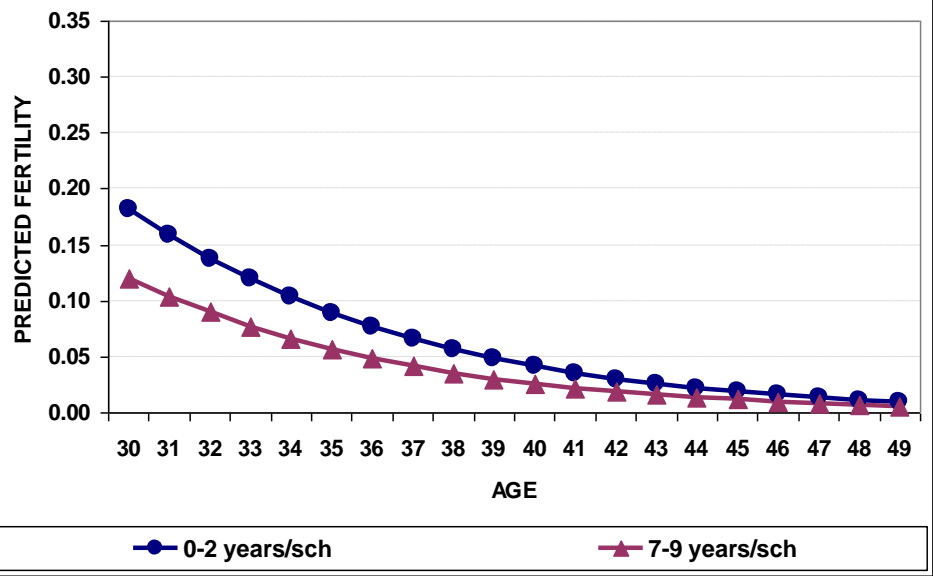




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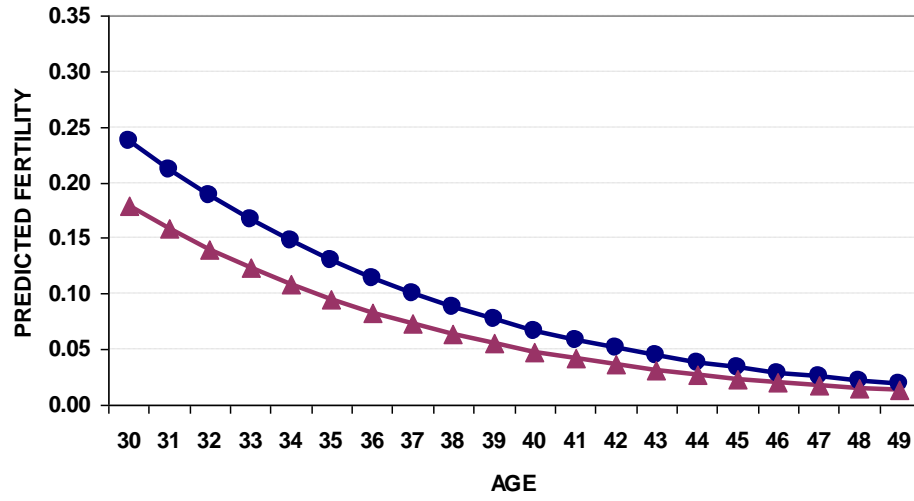


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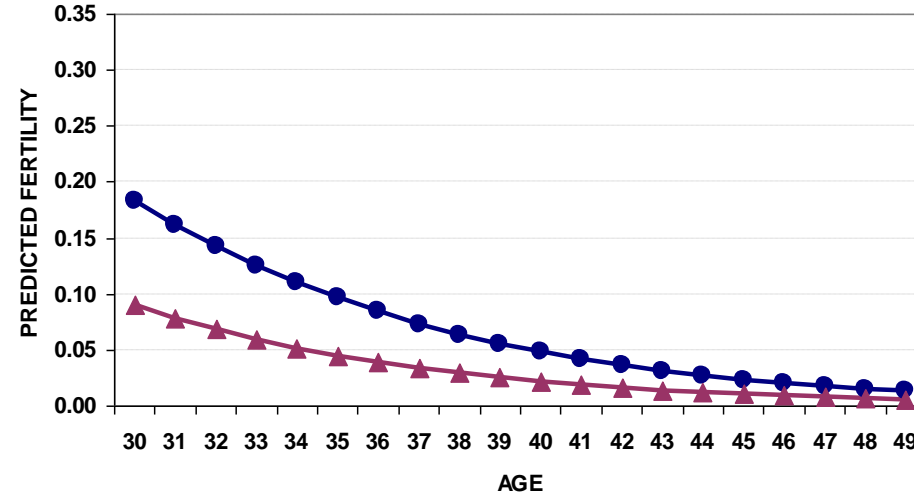


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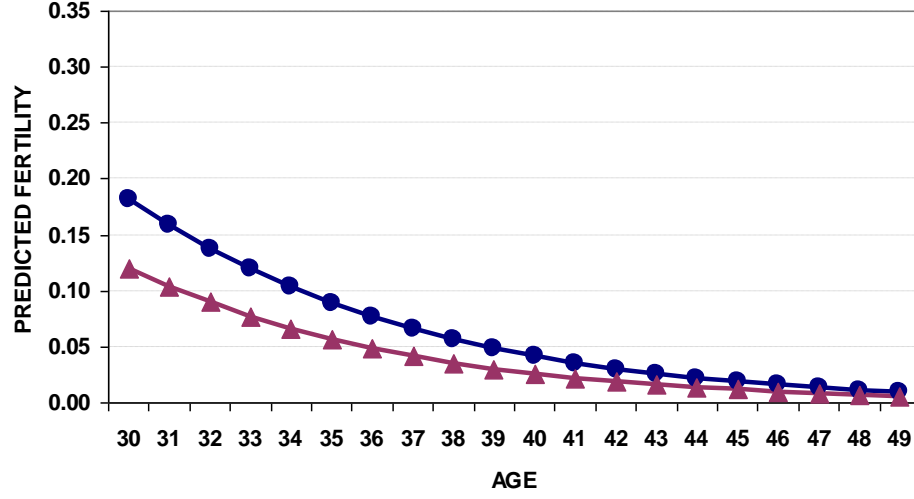
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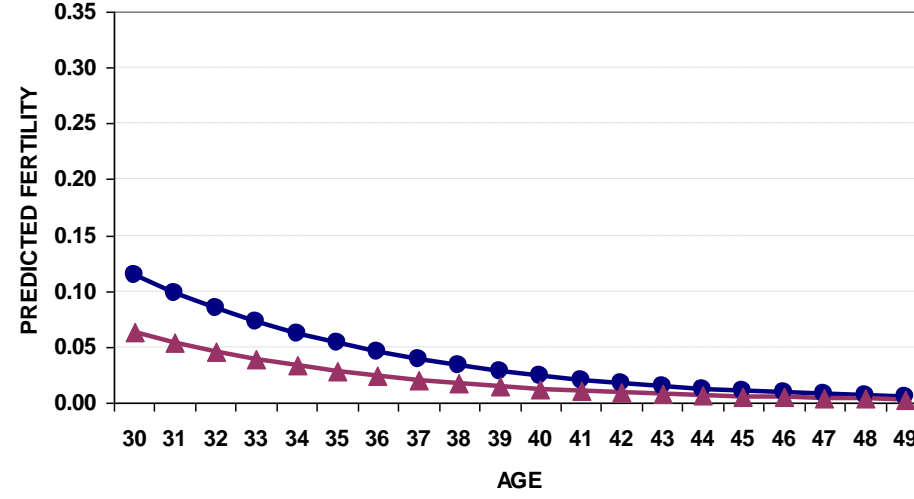
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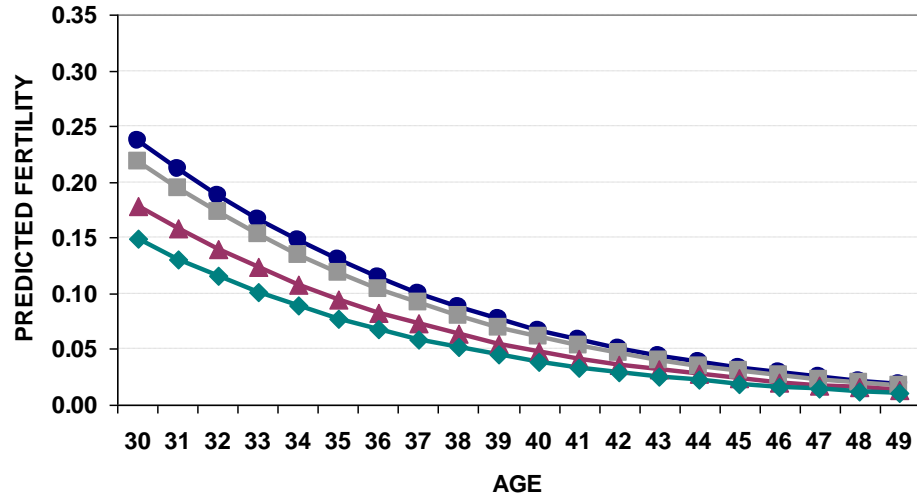
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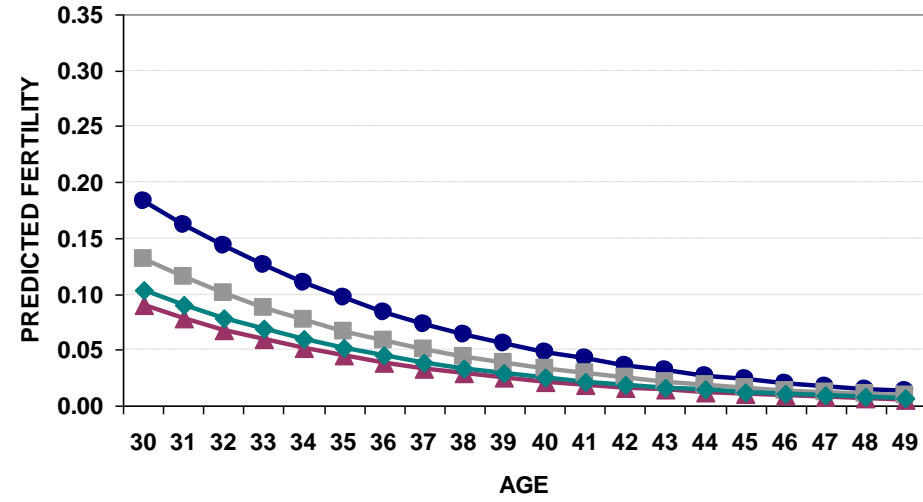
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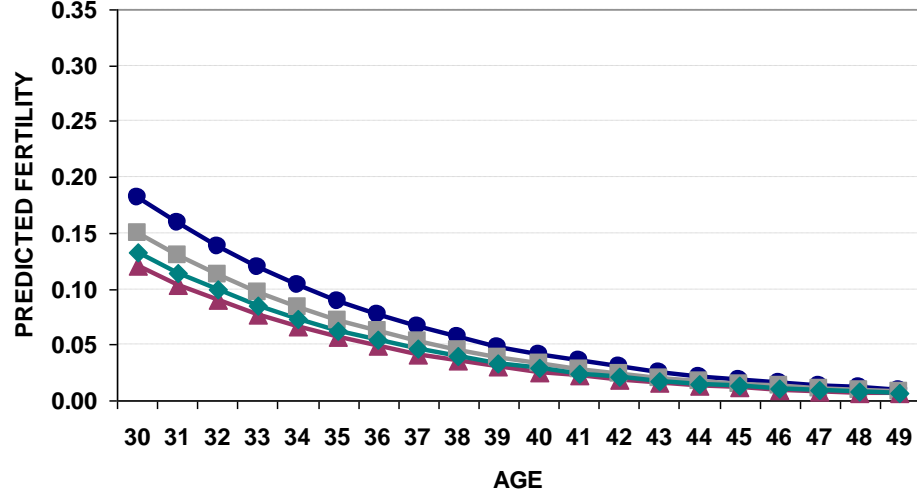
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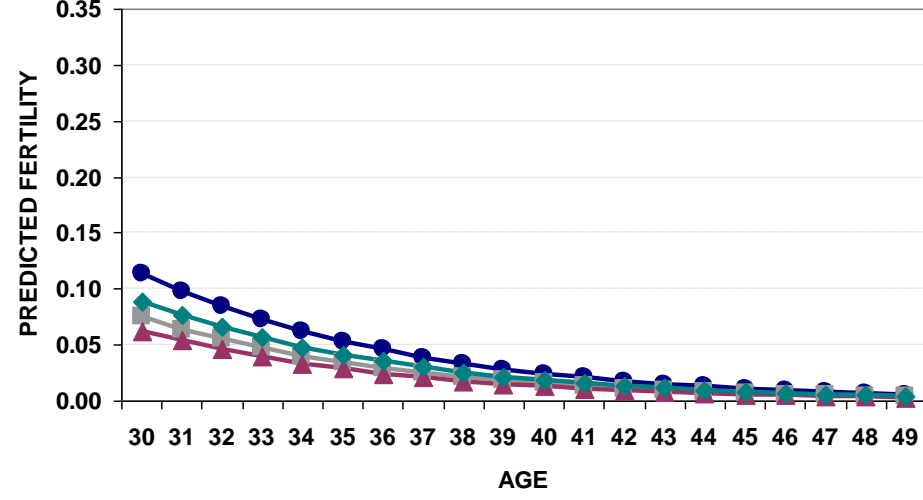
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# DISCUSSION



- Censuses data are indicating that fertility differentials in Brazil and Mexico are quite similar, even though the discussion of public policies would suggest the opposite.
- However, findings for 15-19 age group are consistent with the hypothesis that public family planning programs decrease fertility differentials among women with different socioeconomic status.
- Older age groups, such as 30-49, are mixing women with high parity and those with low parity who are delaying pregnancy.
- Preliminary results suggest that for women with at least 3 children ever born, lower-classes are 4 times more likely to have had a child last year than those not so poor in Piauí.