

# Employed and out of the labor force elderly in Puerto Rico: Differences in demographic, social, and economic characteristics<sup>1</sup>

Vivianna M. De Jesús-Monge, M.S., Ph.D.<sup>2</sup>

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Abstract:	<b>Background/Objectives.</b> 1) To compare demographic, social, and economic characteristics among employed and out of labor force elderly. 2) To explore the relationship between personal total income and specific incomes. Methods. The analysis realized was descriptive and inferential, including cross tabulations, descriptive statistics, correlations, and regression. Results. Nearly 90% is out of the labor force and 10% is employed. With regard to demographic characteristics, employed elderly is younger and male. As for social characteristics, there is a greater percent of employed elders who are married, with higher education, and without disability. With regard to the economic characteristics, there is a greater percent of employed elders classified as non-poor and with higher income. Conclusions. There is relationship between total income and poverty status for both subpopulations, and retirement income contributes strongly to explaining the income of out of labor force elderly.

Key words: labor force, elderly, Puerto Rico

# Introduction

Few studies had taken into consideration the differences among the employed and out of labor force elderly. Employment is an important factor because it could result in having higher income that in turn could place them above the poverty level.

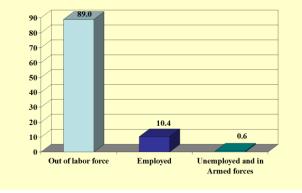
# **Methods**

The analysis realized was descriptive and inferential, including cross tabulations, descriptive statistics, correlations, and regression. The studied population is the 60 years and older persons living in households in Puerto Rico, using the 2007 Puerto Rico Community Survey Sample.

<sup>&</sup>lt;sup>1</sup> Poster presented at the Southern Demographic Association Annual Meeting, in Galveston, Texas, on October 2009

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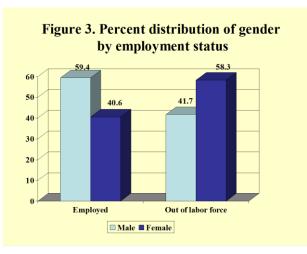
# Results

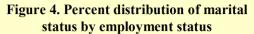


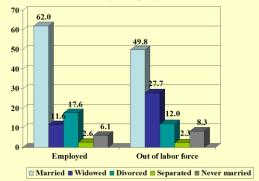
# Figure 1. Percent distribution of employment status

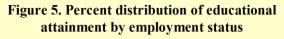
# Figure 2. Median age

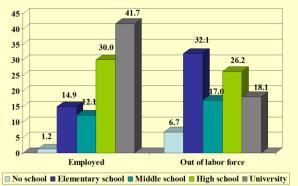
Employed	Out of labor force
63 years	70 years

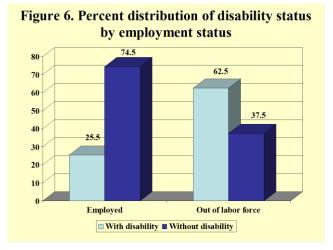


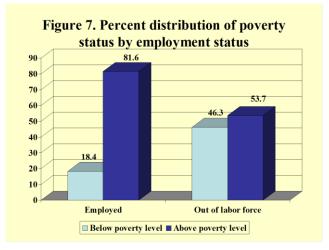












	Employed	Out of labor force
Personal total income	\$18,607.20	\$6,609.12
Social Security	\$0.00	\$5,388.97
Wages or salary	\$12,201.44	\$0.00

# Correlation between wages or salary income and personal total income

- So Employed elderly
  - Using Pearson correlation coefficient, there was a strong, positive correlation between the two variables [r=0.683, n=76,730, p<.0005], with high levels of wages or salary income with high levels of personal total income.

# Correlation between personal total income and poverty status value

- Section Employed poor elderly
  - Using Pearson correlation coefficient, there was a strong, positive correlation between the two variables [r=0.560, n=14,147, p<.0005], with high levels of personal total income with high levels of poverty status value.
- See Employed non-poor elderly
  - Substitution coefficient, there was a strong, positive correlation between the two variables [r=0.596, n=62,583, p<.0005], with high levels of personal total income with high levels of poverty status value.</p>

# Correlation between personal total income and poverty status value (cont.)

- So Out of labor force poor elderly
  - Using Pearson correlation coefficient, there was a strong, positive correlation between the two variables [r=0.630, n=301,452, p<.0005], with high levels of personal total income with high levels of poverty status value.</li>
- So Out of labor force non-poor elderly
  - Solution Section Correlation Coefficient, there was a moderate, positive correlation between the two variables [r=0.430, n=350,263, p<.0005], with high levels of personal total income with high levels of poverty status value.

# Regression between Social Security income, retirement income and personal total income

Solution of labor force poor elderly

- Using standard multiple regression, the model explains 37.0% of the variance in personal total income [r=0.608, R square=0.370, p<.0005].</p>
  - Set Retirement income makes the strongest unique contribution to explaining the personal total income [Beta standardized=0.429].
  - Social Security income made a statistically significant contribution [Beta standardized=0.375].

# CONCLUSIONS

- With regard to demographic characteristics, employment in the older population is related to being younger and male.
- As for social characteristics, employment in the elderly is related to being married, having higher education, and not having disability.
- With regard to economic characteristics, employment in the elders is related to being above the poverty level and having higher income.
- Life events, such as retirement from the labor force, can increase the risk of the elder of being poor.
- Employed elderly
  - Personal total income is related to wages or salary income.
  - As personal total income increases, poverty status value increases.
- Out of labor force elderly
  - Personal total income is related to retirement income.
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# Employed and out of the labor force elderly in Puerto Rico: Differences in demographic, social, and economic characteristics

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# Introduction

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- se Employment is an important factor because it could result in having higher income that in turn could place them above the poverty level.

## Objectives

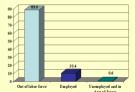
- so Compare demographic, social, and economic characteristics among employed and out of labor force elderly.
- Explore the relationship between personal total income and specific incomes.

### Methodology

- The analysis realized was descriptive and inferential, including crosstabulations, descriptive statistics, correlations, and regression.
- so The studied population is the 60 years and older persons living in households in Puerto Rico, using the 2007 Puerto Rico Community Survey Sample.

## Results

## Figure 1. Percent distribution of employment status



# Figure 2. Median age



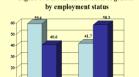
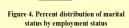
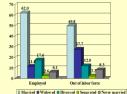


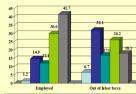
Figure 3. Percent distribution of gender



■ Male ■ Female

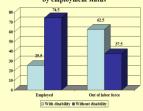


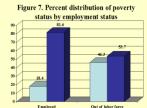
#### Figure 5. Percent distribution of educational attainment by employment status



No school B Elementary school Middle school High school University

#### Figure 6. Percent distribution of disability status by employment status





Below poverty level Above poverty level

## Figure 8. Median incomes

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