



Physical Activity in Comayagua, Honduras

Emma Shirley¹, Rocio Ingles², Ana Ibarra³, Timothy Woodward¹, Katrina D. DuBose¹, PhD

¹Department of Kinesiology, East Carolina University

²Department of Sociology, East Carolina University

³Department of Health Education and Promotion, East Carolina University



Introduction

Limited research exists regarding physical activity levels in Central America. In Honduras (HN), diabetes mellitus and hypertensive heart disease are two of the top ten mortality causes, both of which are closely linked to a sedentary lifestyle (2,3).

Purpose Statement

To investigate physical activity patterns in the rural population of Comayagua, HN to draw conclusions about current health problems.

Methods

Participants

- 18-69 years of age
- Living in Comayagua, HN

Surveys

- Demographics (Table 1)
- The International Physical Activity Questionnaire (IPAQ) in USA Spanish
 - Scored using standardized procedures
 - Physical activity (PA) categories created (low, moderate, high) (4)
- The surveys were orally administered.

Incentive

- a 1-lb bag of black beans and a 1-lb bag of rice (traditional staples in the Honduran diet).

Statistical Analysis

- Means and frequencies were calculated for demographic and PA variables.
- T-test examined differences in PA minutes by sex for each category of PA.
- Regression analysis examined the relationship between total PA time and body mass index adjusting for sex.
- Statistical significance was set at $p < .05$.

Figure 1. IPAQ Total PA Score

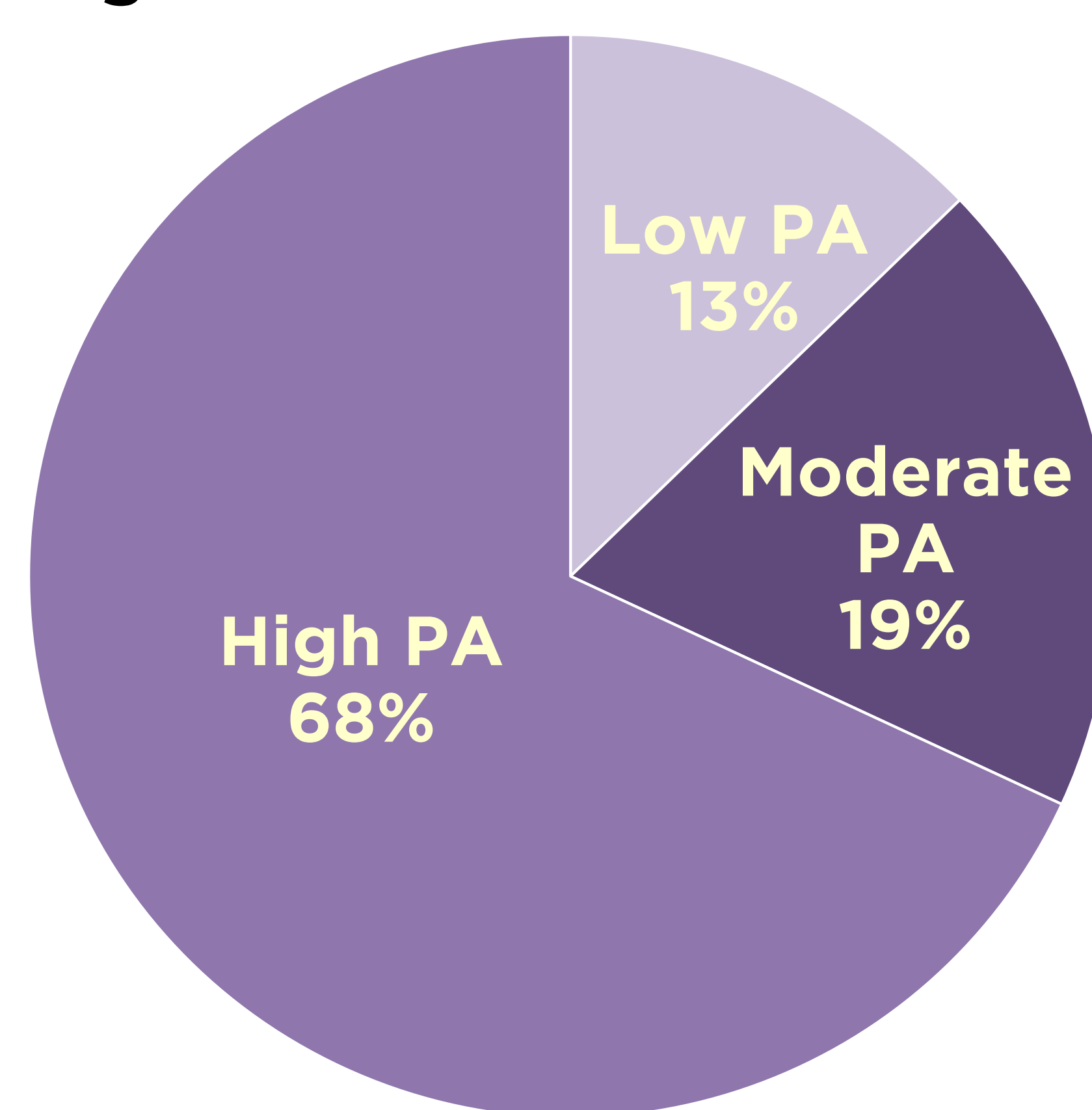


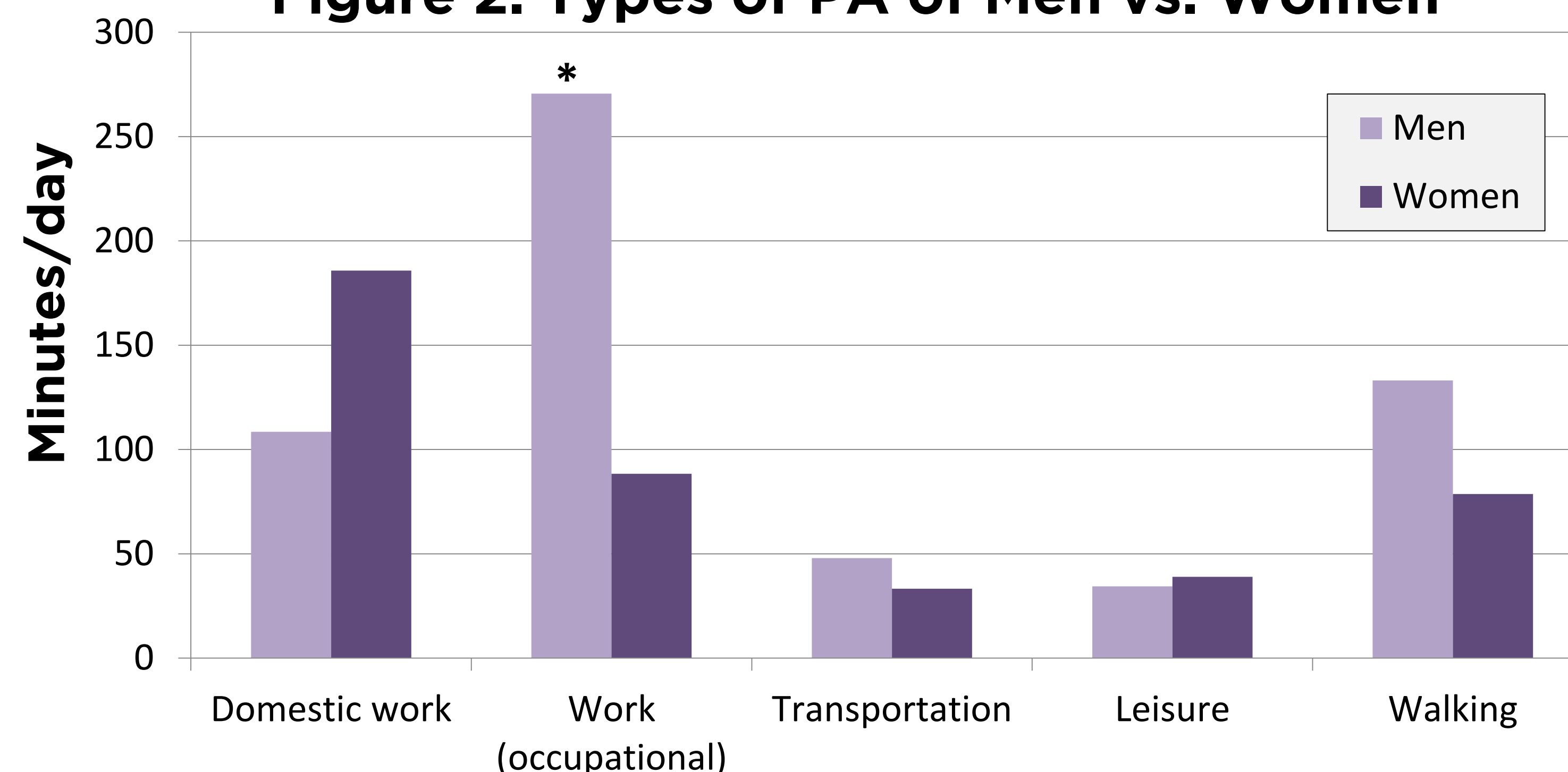
Table 1. Demographics

	N = 47	#	%
Age (years)	N = 45	M = 45.60	
Gender			
Men		17	36.96%
Women		29	63.04%
BMI category (N=28)			
1 (healthy weight)		11	39.39%
2 (overweight)		9	32.14%
3 (obese)		8	28.57%
Number of children (N=45)			
0 - 1		9	20.00%
2 - 3		19	42.22%
4 - 5		5	11.11%
6 +		12	26.67%
Education level (N=37)			
No school		4	10.81%
Elementary		17	45.95%
Middle school		4	10.81%
High school		3	8.11%
Some college or college degree		7	18.92%
Post-college		2	5.41%

Implications

- Hondurans engage in high levels of moderate PA and thus are very active in everyday life.
- Most PA occurs at work followed by domestic work.
- Women engage in work-related PA less than their male counterparts.
- There is no statistically significant difference between engagement by men versus women in domestic PA.
- ❖ Because Hondurans are highly active and PA was not related with body mass index, physical inactivity is probably not a cause of obesity or other metabolically-linked diseases such as diabetes mellitus and hypertensive heart disease.
- As nations develop and industrialize, PA levels decrease (1).
- Because PA in Hondurans is primarily engaged in at work, PA levels need to be monitored as the country develops and numbers of sedentary jobs increase.
- ❖ PA patterns in HN should be assessed every few years as the nation advances to counter potential rising inactivity.

Figure 2. Types of PA of Men vs. Women



Results

- After adjusting for sex, there was found to be no relationship between total PA and BMI ($p=0.2145$).
- High PA was most frequent PA category (Figure 1).
- Of the areas of PA, most was done while at work (Figure 2).
- PA at work was also the only area of statistical difference between men and women ($p=0.040$; Figure 2).
- PA during domestic work around the home was second most frequent.
- Moderate PA was the most frequent intensity of PA, versus walking PA and vigorous PA.

References

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