Exploring Occupational Gender Segregation among Adolescents in Cebu, Philippines

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Introduction

Global conferences such as the International Conference on Population and Development (held in Cairo in 1994) and the Fourth World Conference on Women (held in Beijing in 1995) acknowledge gender equality to be essential for sustainable development. One of the areas where efforts are targeted to reduce or eliminate gender inequality is in the labor market.

Women and men tend to work in different occupations, and this segregation has been suggested to cause the continuing discrepancies in wages among men and women. Estimates of the wage gap attributed to occupational gender segregation range from 8 percent to 35 percent depending on the data and statistical methodology (Preston 1999).

The Philippines has been making significant strides towards women empowerment and gender equality – gender concerns are being mainstreamed in government policies and programs. Labor participation rate of women has been steadily increasing in recent years, from 50.5 percent in 1996 to 54.9 percent in 2001 (ILO 2003). However, gender segregation in the labor market persists. Employment data compiled by ADB (2004) showed gender segregation following socially ascribed roles and responsibilities of men and women. Women were predisposed to be employed in nurturing functions, such as in private households as housekeepers, in education and in health and social work. By occupation group, the highest concentrations of females relative to males were as laborers and as unskilled workers. This segregation suggests poorer quality of women's work since these occupations do not usually have good terms of employment (i.e. overtime pay, health benefits, tenure).

The youth population (ages 15 to 24 years) is a significant economic force in the Philippines. The working youth accounted for 20 percent of the total employed persons in 2002. At the same time, this group contributed half of the total unemployed persons. Young women had a lower labor force participation rate (LFPR) compared to young men (38 percent and 58.7 percent, respectively). This gender disparity is more pronounced in rural areas, where young women's LFPR was 35 percent against men's 64 percent (Commission on Population 2003).

A study (Warren et al 2002) on occupational stratification using a life course in Wisconsin suggests that gender effect on occupation is greater at younger ages – gender matters most when people are beginning their careers. From career entry, men tend to work in occupations that pay better than the occupations in which women tend to work. Whether this is true in the Philippines cannot be ascertained, information on the extent of segregation, particularly among adolescent workers, has been lacking. In this paper, the authors will explore the presence and extent of occupational gender segregation and examine demand side and supply side factors that are associated with occupational choice among adolescents.

Data and Methods

The authors will use data gathered by the Cebu Longitudinal Health and Nutrition Survey (CLHNS) on a community-based sample of individuals born between 1983-84 in metropolitan Cebu, the second largest metropolitan area in the Philippines. A stratified, single stage sampling was used to select 33 barangays (smallest administrative unit) – 17 urban and 16 rural barangays. Households in the selected barangays were surveyed and information was collected on all births occurring between May 1, 1983 to April 30, 1984. Of the original cohort of about 3,080 births, 2,051 remain in survey in 2002. Table 1 shows the 2002 profile of these births, focusing on those who have ever worked (1,851) and who were working (962) at the time of the 2002 survey. Table 2 and Table 3 show the distribution of the adolescent workers according occupation and industry.

The 2002 CLHNS survey collected on individual, household and community level data through face to face interviews using structured questionnaires. For the 2,051 participants, there are data on income and assets, schooling and employment, decision-making and several health and health-related measures. In addition, at the community level, major business/work establishments provided data on employment and recruitment.

Gender differentials in occupation will be explored using descriptive statistics showing proportions of participants in major industry and occupation groups. Female and male dominated industries and occupations will be identified by this definition: an occupation is said to be (fe)male dominated if its (fe)male share of employment is higher than the overall (fe)male share of employment (Watts 1998). Moreover, we will attempt to compute an index of segregation using the Karmel and MacLachlan Index (1988). This index is based on the understanding that segregation means a different distribution of women and men across occupational categories, and the more equal the distribution over occupations, the less segregation. This index is interpreted as the proportion of the workforce (persons in employment) which would need to change occupations to remove segregation considering female and male shares of occupations (Emerek et al 2003). As stated in Watts (1998) the Karmel and MacLachlan Index (I_p) can be computed using:

$$I_p = (1/T) \Sigma \mid F_j - a(M_j + F_j) \mid$$

where T and a are total employment and the female share of total employment, respectively, and F_j and M_j are the number of female and male employees in the $_j$th occupation. The number of females in occupation j under occupational integration is $a(M_j + F_j)$. The Karmel and MacLachlan approach can also be used to analyze the contribution of the occupational groups to the overall segregation index.

To better understand gender segregation among the participants, the authors will examine demand side factors such as income, education, residence location and work motivations, and supply side factors such as work requirements and job availability that may have influenced occupational 'choice'. Gender differentials in earnings, number of working hours, regularity of work and worker class will also be reported.

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TABLE 1. Profile of sample adolescents by work status, CLHNS 2002

Characteristic	Work status			
	Ever worked (n =1851)		Currently working (n=962)	
	Number	%	Number	%
Age (yrs)				
17	12	0.6	6	0.6
18	1482	80.1	755	78.5
19	357	19.3	201	20.9
Missing data	0		0	
Sex				
Male	1010	54.6	521	54.2
Female	841	45.4	441	45.8
Missing data	0		0	
Educational Level				
Elementary or less	342	18.5	230	23.9
High school	1109	59.9	582	60.5
College or higher	400	21.6	150	15.6
Missing data	0		0	
Enrolled in school				
No	1232	66.6	755	78.6
Yes	618	33.4	206	21.4
Missing data	1		1	
Marital status				
Never married	1659	89.6	869	90.3
Ever married	192	10.3	93	9.7
Missing data	0		0	
Household location				
Rural	538	29.1	320	33.3
Urban	1313	70.9	642	66.7
Missing data	0		0	

TABLE 2. Percent distribution of CLHNS youth by occupational classification and job status, 2002*

Classification	First job		Last job		Current job	
	Number	%	Number	%	Number	%
Administrative/executive/managerial	4	0.2	12	0.6	8	0.8
Clerical	32	1.7	72	3.9	32	3.3
Sales	633	34.2	529	28.6	253	26.3
Farming/fishing/hunting	181	9.8	97	5.2	59	6.1
Mining/quarry	20	1.1	9	0.5	6	0.6
Transportation/communication	72	3.9	105	5.7	61	6.3
Craft/production	510	27.6	664	35.9	371	38.6
Service/sports	374	20.2	323	17.4	154	16.0
Professional/technical	25	1.4	40	2.2	18	1.9
Missing data	0		0		0	

* First and last jobs of all youth who have ever worked, current job applicable only to those working at time of survey

TABLE 3. Gender distribution by industry classification of CLHNS youth workers*, 2002

Characteristic	Number	% Female	% Male
Agricultural/fishery/forestry	60	21.7	78.3
Mining and quarrying	4	0.0	100.0
Manufacturing	250	59.6	40.4
Electricity/gas/water	13	23.1	76.9
Construction	46	2.2	97.8
Wholesale/retail	267	58.4	41.6
Transportation/storage/communication	44	2.3	97.7
Financing/insurance/real estate/business	26	50.0	50.0
Community/social/personal services	247	41.3	58.7
Others	4	50.0	50.0
Missing data	1	1	
Total	962	45.8	54.2

* Working at the time of the survey.