

Socio-demographic composition of the sample

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Socio-demographic Analysis of the Kiev and Zhitomyr sample
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- Computerfiles associated with this report are sociodemogray1.do and sociodemogray1.pdf

1 Socio-demographic composition of the Kiev and Zhitomyr sample

1.1 Organization of this chapter

We describe the salient sociodemographic characteristics of our sample by addressing the gender and age distributions first. We briefly discuss the residential geography of the sample before addressing the educational attainments

Table 1 Gender distribution of the sample

Respondent's gender	Freq.	Percent	Cum.
1. male	340	48.36	48.36
2. female	363	51.64	100.00
Total	703	100.00	

and then aspects of employment and occupational prestige. Another aspect of socio-economic status is the relative income level of the respondent and the sufficiency of that income to meet the demands of the person and his family. Last but not least, we turn to the family structure and the size of the family. As a rule, we round the percentages to the nearest tenth, unless we explicitly specify otherwise. First, we address the gender distribution of our sample.

1.2 Gender

Our sample of 703 respondents consists of 48.4% (340) males and 51.6% (363) females. Ordinarily, we would compare the summary statistics with those of the Ukrainian Census to provide evidence of the representativeness of our sample. However, the most recent Ukrainian census took place 8 year before our data collection began, in 2001. Because of the financial and political crises within the Ukraine, the next census has been postponed till 2012. Since the previous census, the population has probably changed enough to render the 2001 census statistics obsolete with respect to a basis for comparison. For this reason, we merely present the summary statistics of the sociodemographic composition of the sample as we find them. But because our analysis will focus on psycho-socio-medical aspects of the population, we analyze the subject matter by gender.

2 Age group by gender

In Table two, the age by gender distribution is presented. The average age of the males is 49 and that of the women is 50, with standard deviations being respectively 12.2 for the males and 11.9 for the women. From the base of Table two, it can be observed that there is not a statistically significant difference between the distribution of the males and that of the female ages, according to

Table 2

highest educational level the respondent have completed	Freq.	Percent	Cum.
1. did not graduate high school	1	0.14	0.14
2. graduated high school	36	5.12	5.26
3. technical degree	242	34.42	39.69
4. did not finish college/bachelor's	38	5.41	45.09
5. graduated college/bachelor's	97	13.80	58.89
6. finished specialist/master's degree	281	39.97	98.86
7. doctor of science/phd	6	0.85	99.72
8. doctor of medicine/md	2	0.28	100.00
Total	703	100.00	100.00

the Pearson $\chi^2(6) = 0.375$. There are somewhat more women than there are men, but the difference is not a significant one.

The age distribution for both men and women is weighted more toward the years from 30 through 59. Very few individuals younger than 30 are in the sample and the sample tapers off in age as the ages range above 69 years old. We might expect this to be the case if those interviewed believed that they had been affected at all by Chornobyl. The key by which the cells in the table are interpreted is provided in Table two. Unless specifically otherwise stated, this is the key that will be used in our crosstabulations henceforth.

3 Geographical distribution of residence

In a survey of the Kiev and Zhitomyr Oblasts, it is not surprising that the vast majority—603 or approximately, 86 % reside in Kiev. Only 99 respondents—approximately 14.08 %—report a residence in the Zhtiomyr oblast.

4 Educational attainment by gender

This sample is highly literate. We can see from Table 3 that more 99% of the respondents had more than a high school diploma. Among both males and females, about one third have at least some sort of technical degree and more than a third have a masters level or a specialist degree. The sample consist of persons who take educational seriously in that less than three percent of the males and eight percent of the females have only graduated high school. Similarly, less than five percent of the males and seven percent of the females

only have had some college. In general, pluralities of males and females have a technical or graduate degree.

When males are compared to females, there is not a statistically significant difference between their educational distributions. The percentages of either sex who attain a doctorate are tiny when compared to the percentages that attain lesser degrees. That is frequently the case in most societies.

5 Employment status by gender

In Table 4, we observe almost all individuals— at least 98% of the respondents answered this question. It is possible that a few of them were uncertain as to whether they were being offered employment or not or had decided to accept such an offer. Most respondents reported working full time. In 1986, 68.4% of the respondents indicated that they had a full-time job. From 1987 thru 1997, 75% of the respondents maintained that they were fully employed, whereas since 1997, almost 65% of the respondents said that they had full-time jobs.

Regardless of the time period (wave) in our study, approximately 10% of the males indicated that they had a part-time job. For the women, however, this was generally not the case. In 1986, approximately 5% of the women reported being part-time employed, but this proportion grew to 85% in the following decade, but diminished since then to only 6.6 % of the women.

Unemployment diminished as time passed. In 1986, almost 19% of the males and 20% of the women maintained that they were unemployed. In the following time period of 1987 through 1996, these levels dropped to 4.5% and 6.4% respectively. Before the study was completed, these levels declined further, to 2.3% and 5.1% respectively.

Although we observe that retirement increased, this is a function of the age and period during which we interviewed the respondents. Approximately, one fourth of our sample consisted of retirees. Almost 22% were males and 28% were females. The likelihood ratio $\chi^2(4)$ tests at the base of Table 4 reveal a significant difference in gender distribution of employment, regardless of the time period.

6 Occupational status by gender

When we examine their occupational status in Table 5, we find that their situation changed over the years. In 1986, approximately one third of the sample of respondents were students. Almost 38% of the males and 29% of the females at that time were students. In wave two, the proportion of students declined to 10% of the sample, and in more recent years (during wave three), the percentage dropped off to about one percent. The age cohort being interviewed would place them for the most part in school in the first wave.

About one fifth (21% of the sample) of the respondents in 1986 were serving in professional, executive, or administrative positions in 1986, with 20% of the

Table 2: Age group by Gender

Key			
frequency			
row percentage			
column percentage			
cell percentage			
Age group	Respondent's 1. male	Gender 2. female	Total
Less than 30 yrs	0 0.00% 0.00% 0.00%	1 100.00% 0.28% 0.14%	1 100.00% 0.14% 0.14%
30 to 39 yrs	93 50.82 27.35 13.23	90 49.18 24.79 12.80	183 100.00 26.03 26.03
40 to 49 yrs	86 52.12 25.29 12.23	79 47.88 21.76 11.24	165 100.00 23.47 23.47
50 to 59 yrs	83 43.92 24.41 11.81	106 56.08 29.20 15.08	189 100.00 26.88 26.88
60 - 69 yrs	54 45.76 15.88 7.68	64 54.24 17.63 9.10	118 100.00 16.79 16.79
70-79 yrs	24 53.33 7.06 3.41	21 46.67 5.79 2.99	45 100.00 6.40 6.40
80+ yrs	0 0.00 0.00 0.00	2 100.00 0.55 0.28	2 100.00 0.28 0.28
Total	5 340 48.36 100.00 48.36	363 51.64 100.00 51.64	703 100.00 100.00 100.00
Pearson chi2(6) = 6.4470 p = 0.375			
likelihood-ratio chi2(6) = 7.6070 p = 0.268			

males and 23% of the women occupying professional, executive, and administrative positions at that time. We find that this proportion gradually rises from wave to wave. In recent years the proportion of the sample serving in this occupational status rises to almost 27%, one fourth of whom are males and almost 29% being females. For the most part, women have a slightly higher percentage in this upper status category than do the men, regardless of the period of time.

As for technical sales and administrative support roles, these percentages rise dramatically from about 14% in 1986 to about 18% in the following decade. They decline only about one percent in more recent years. In this occupational status, males are more predominant than females throughout our three waves of time.

There is a clear growth in the service and protective service occupations over the three waves. The greatest increase in the proportion of these jobs takes place as the middle wave emerges. By the middle wave, about 10% of the jobs are classified according to this category. For the most part, females slightly surpass males in having these jobs.

The precision production, mechanical, craft, and construction positions constitute about 6 percent of the jobs in recent years. But the proportion of these jobs increased during the middle wave and declined slightly more recently. This is a job classification in which males outnumbered females throughout all three waves.

With respect to factor labor, women and men had almost an equal proportion of these jobs in 1986. But males came to predominate in this category by the middle period. They continued to outnumber females here in recent years as well.

As far as farming, forestry, fishing, trapping, and logging is concerned, this sector of the labor market was occupied by less than 2 percent of the positions no matter what the wave under consideration. Equal distributions of males and females held these positions.

Homemaking and caregiving grew as a portion of the labor market over time. In 1986, only about 3% of the jobs were classified as such. However, in recent years this proportion grew, as did the ages of the respondents to include about almost one-fourth (23.8%) of the respondents, with females dominating this sector by occupying a fourth of it while males filled about one-fifth of it.

7 Income sufficiency by gender

Table 6 reveals the levels of reported income sufficiency for our respondents, by gender. Over the three waves of our study, we observe that a growing proportion of the respondents maintain that their income is not sufficient to provide them with basic necessities. Actually, this level declines in the middle period but rises to almost (13.9% what it used to be in 1986(14.2%). A much larger percentage (42.1%) of the sample maintains that their income is just sufficient for basic necessities, representing an increase of about two percent since 1986. Only about 29% of the sample maintain that their income is adequate for basic necessities

Table 3: Highest educational attainment by gender

	Respondent's 1. male	gender 2. female	Total
Grade school	0 0.5 0.00 0.00 0.00	1 0.5 100.00 0.28 0.14	1 1.0 100.00 0.14 0.14
High school grad	10 17.4 27.78 2.94 1.42	26 18.6 72.22 7.16 3.70	36 36.0 100.00 5.12 5.12
Tech degree	114 117.0 47.11 33.53 16.22	128 125.0 52.89 35.26 18.21	242 242.0 100.00 34.42 34.42
Some collage	14 18.4 36.84 4.12 1.99	24 19.6 63.16 6.61 3.41	38 38.0 100.00 5.41 5.41
Bachelors degree	50 46.9 51.55 14.71 7.11	47 50.1 48.45 12.95 6.69	97 97.0 100.00 13.80 13.80
Masters or specialist degree	146 135.9 51.96 42.94 20.77	135 145.1 48.04 37.19 19.20	281 281.0 100.00 39.97 39.97
PhD	4 2.9 66.67 1.18 0.57	2 3.1 33.33 0.55 0.28	6 6.0 100.00 0.85 0.85
MD	2 1.0 100.00 0.59 0.28	0 1.0 0.00 0.00 0.00	2 2.0 100.00 0.28 0.28
Total	340 340.0 48.36 100.00	363 363.0 51.64 100.00	703 703.0 100.00 100.00

plus some extra purchases and savings. The proportion of the population who say that their income affords them comfort and luxuries decreases from 6.8% in 1986 to a mere 3.1% now.

If we examine the gender differential for income sufficiencies, we observe some interesting phenomena. In 1986, the males more than the females maintained that their income was inadequate, whereas in more recent years, greater percentages of females (15.7%) than males (12.1%) complained about this inadequacy. In 1986, 29.7% of males and 25.6% of females reported bare sufficiency of income, whereas in recent years this proportional difference grew to (55.6%) males and females (39.9%) complaining about it. When reporting an adequate or better than adequate income, males in greater proportions than females expressed these sentiments, regardless of the time period (Table 6).

8 Marital status and family size

8.1 Marital status and gender

In Table 7, we can observe the nature of marital structure over the three waves of our study, as reported by the respondents. Most of the respondents are married, regardless of the period of time. Actually, the proportion of respondents who are married increases from wave one (52.4%) to wave two (68.4%). The same proportion increases a little more in more recent years to almost 70% during wave three. Over time we note that the proportion of the respondents who are married increases slightly.

However, the proportion of the respondents who are single declines over time. It is highest during 1986 when almost 43 percent of the sample are single. By wave two, this percentage declines to about 23 percent and by the time of the interview, the proportion of the sample who are single diminishes to 9.1%.

The stability of the marriage remains intact over time as well. By wave three, only a little more than one percent are separated whereas 7 percent are divorced, which is less than the 8.7% of the sample who are widowed.

According to the Likelihood ratio $\chi^2(5)$ tests, the distributions of males and females for each wave appear to be significantly different from one another, in that more males are single than females no matter which wave we consider. For all waves, the proportions of males that are cohabiting is larger than that of females in the study. In the first two waves, the proportions of married women in the study seem larger than those of the males. But during the last wave, the proportion of married males exceeds that of married females slightly. The tests of significance can be found at the base of Table 7.

8.2 Family size and the number of children

From Table 8, we can see that by the end of the third wave a plurality (42.8%) of families have two children. A smaller fraction (36.1%) of families have one child and an even smaller proportion (15.5%) have no children at all.

If we search for childbearing trends, we note that most families who have children have two of them regardless of the period of time. During 1986, 26% had two children, and by wave two this percentage rose to 35%. By the third wave, this had risen to 42.8%. The proportion of families with no children declined over the waves from 48.4% in 1986 to a little less than 16% in 2009-2010.

The proportion of families who had three or more children were three or more remained very small throughout the study. By wave three only 5% of those respondent reported having three children and less than one percent reported having four or more children.

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