## Chapter Two Illustrations

Rossi et. al. Evaluation

## Examples of poverty thresholds in 2013

One adult, one child

\$16,057



One adult, two children \$18,769 Two adults, one child \$18,751 Two adults, two children \$23,624

Source: Mack (2015).

## EXHIBIT 2-C PROBABILITY SAMPLING DESIGNS

Probability Sampling Design	Definition	Salient Characteristics
Simple random sample	<ul> <li>All members of the study population have as equal chance of selection in the sample.</li> </ul>	<ul><li>Simple to conduct.</li><li>Requires a complete list of the study population.</li></ul>
Systematic sample	• All members of the target population have a known, nonzero chance of selection in the sample.	<ul> <li>Requires an interval (<i>i</i>) at which sample units are selected (<i>i</i> = <i>N</i>/<i>n</i>) and random start between 1 and <i>i</i>.</li> <li>Can be used in situations in which a complete list of the target population is not available but partial lists (or actual members of the target population) can be accessed at different sites.</li> </ul>
Cluster sample	<ul> <li>All units of the target population are members of one and only one cluster.</li> <li>All clusters have an equal chance of selection into the sample</li> <li>Data are collected on all units in the randomly selected clusters.</li> </ul>	<ul> <li>Often used when members of the target population are in naturally occurring groups, such as teachers in schools or case workers in county social service offices.</li> <li>Reduces precision compared with a simple random sample of the same size (amount of reduction depends on how much of the variation of the variable of interest is between clusters; more within-cluster variation improves precision).</li> </ul>
Stratified random sample	<ul> <li>All units of the target population are placed into one and only one stratum.</li> <li>A known, nonzero sample of units is selected from each stratum.</li> <li>The probability of selection within strata can be equal or unequal depending on study goals.</li> </ul>	<ul> <li>Often useful when smaller subpopulations that are proportionately larger in some strata are of particular interest for the evaluation (e.g., underrepresented groups).</li> <li>Improves precision compared with a simple random sample of the same size (amount of improvement depends on the correlation between strata assignment variable and variable of interest).</li> </ul>
Multistage sample	<ul> <li>Similar to cluster samples in that all members of the target population are members of a cluster.</li> <li>Clusters are sampled at the first stage, and then units are selected in the second stage for two-stage samples.</li> <li>Multiple clustering such as individuals within census tracts within counties can be combined.</li> <li>Clusters can be stratified before sampling.</li> </ul>	<ul> <li>Often useful in large, multipurpose probability samples drawn at the international, national, or state or provincial level.</li> <li>Requires sampling expertise to compute sampling weights if the probability of selection for final units is unequal and to calculate standard errors for hypothesis testing.</li> </ul>

Source: Adapted from Henry (1990).

## EXHIBIT 2-H PREVALENCE OF VIOLENT CRIME BY DEMOGRAPHIC CHARACTERISTICS OF VICTIMS

	Number of Persons	Prevalence		
Victim Characteristics	Victimized	Rate (%)		
Total victimization in 2016	3,629,180	1.33		
Gender				
Male	1,872,700	1.41		
Female	1,756,490	1.26		
Race/ethnicity				
White	2,318,090	1.34		
Black	485,670	1.44		
Hispanic	540,690	1.21		
Other	284,730	1.34		
Age (years)				
12–17	469,490	1.88		
18–24	565,950	1.86		
25–34	861,490	1.95		
35–49	901,440	1.47		
50–64	646,900	1.02		
65 and older	183,910	0.38		
Marital status				
Never married	1,822,230	1.90		
Married	1,027,340	0.80		
Widowed	96,920	0.64		
Divorced	533,160	1.98		
Separated	140,290	2.79		

Source: Morgan and Kena (2016).