

## **American Public Opinion on Population Size and Growth**

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### **ABSTRACT**

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*Context.* A wide variety of recent public opinion surveys have described knowledge of and attitudes toward national demographic trends. Such studies have provided little information on causal factors, and have usually ignored attitudes toward sub-national areas. A recent survey of about 1,000 New York State households has filled in some of the gaps.

*Methods.* Survey respondents were chosen to be representative of all New York State households with telephones, but upstate (non-New York City) households were over-sampled. Results here are unweighted. Interviews of approximately 20 minutes were conducted by telephone.

*Results:* (1) There seems to be a general “demographic sophistication” factor since correlations are moderately high among population knowledge levels for state, nation, and world. (2) The best predictor of population knowledge was gender, followed by education. Multivariate analysis does not diminish the importance of either characteristic. (3) Although knowledge of the population size and rates of growth of NY State, the USA and the world is markedly deficient, superior knowledge shows no relation to concern over population size or growth. (4) The strongest predictor of concern about population is residence—urban residents are more concerned than rural residents about local, state and national size. (5) A lesser but significant predictor of population attitudes is general concern about environmental problems, especially where attitudes toward world population are concerned.

## **PUBLIC PERCEPTIONS OF POPULATION IN NEW YORK STATE\***

Americans have long viewed population growth as a sign of economic and cultural vitality, and as a necessary ingredient of "development." Partly in response to this belief, the nation's government has persistently failed to enunciate a national population policy. A major effort to do so was launched almost three decades ago, but the Commission on Population Growth and the American Future's recommendations were ignored by the Nixon and subsequent administrations. Nevertheless, growing public educational efforts on the part of environmental and population NGOs, mounting concern over suburban sprawl as well as the adoption of population policies by many other nations have created a more favorable climate for public discussion of national demographic issues. A literature review by the author suggests a number of shortcomings to scholarly understanding of public attitudes on population. Most reports are limited to marginal distributions of attitude items, information levels of respondents are rarely assessed, data on attitudes toward population factors in sub-national areas such as states, counties or communities are lacking, and the potential determinants of population knowledge and attitude (such as general attitudes toward the environment) are rarely analyzed. This paper is directed toward such gaps, by reporting the results of a survey of population knowledge and attitudes on the part of the general public in New York State.

Attitudes Toward World Population. A variety of public opinion polls confirm that very few Americans favor a larger *world* population. Moreover, concern about it goes back at least to the mid-1960s. Polls taken at that time indicate that about two-thirds of the American public thought world population growth was a serious problem (Mindick, 1977).<sup>1</sup> About two decades later, pollster Louis Harris summarized public opinion as follows: "Two of every three Americans believe that overpopulation is a major cause of the food shortages that are resulting in so much starvation worldwide. Even when birth control programs also have built-in-abortion programs, ... a majority of Americans favor spending US dollars to help finance such efforts in developing countries..." (Harris, 1989: 178).

The most recent surveys also suggest considerable concern. A 1994 national poll asked "In your opinion is the world overpopulated, under-populated or just about the right number of people in the world?" Only 5 percent chose "under-populated" and sixty percent chose "overpopulated" (24 percent "very much so") (Belden and Russonello, 1994). Americans still favor US assistance for population and fertility control in developing countries. For example a 1998 national survey sponsored by the Rand Corporation asked respondents to rate the importance of "goals for US economic and environmental assistance" on a scale of one to ten." As many as 22 percent assigned the top rating of ten to "helping countries slow their rate of population growth," considerably more than chose "improving economic conditions in developing countries" (15 percent) (Adomson et al., 2000). (Problems that scored higher than population included "improving children's health" and "protecting the global environment.")

Belden and Russonello (1994) also conducted a recent national population poll for the Pew Charitable Trusts. Telephone interviews were conducted with 2080 persons who had voted

in the 1992 presidential election. Respondents were asked to rate the seriousness of a variety of problems, on a scale ranging from 1 (no problem) to 10 (a very serious problem). A set of five "International issues" included "rapid population growth", which scored 7.1 on the ten point scale. This matched the mean score of 7.1 for the other four issues, which included the threat of nuclear weapons and the threat of regional and civil wars. Population growth outranked "threats to the global environment," which scored 6.9.

This survey also included a set of seven ratings of "global environmental issues." "Rapid population growth" had an average rank of 6.6, compared to an unweighted mean of 6.9 for the other six issues. Population strongly outranked global warming and ozone depletion (6.0) and was on a par with over consumption of resources (6.7), but fell somewhat behind "toxic wastes" and "loss of rain forests (7.4 and 7.2). Certainly in the international and global problem areas Americans rate population problems relatively highly. At a minimum they are on a par with the importance attributed to other major environmental problems.

Although I have stressed the evidence of overpopulation concern on the part of the US public, the polls show disturbingly large swings of opinion. Some examples are provided by a recent paper (Schindlmayr, 2001) covering the past few decades:

"In 1959, just 21 percent of Americans stated that they were worried about global population growth. By 1965 62 percent thought global population growth was a serious problem, and this proportion rose to 71 percent in 1967."

"The proportion of Americans who perceived overpopulation as a serious problem declined from 60 percent in 1974 to 44 percent in 1978."

"A 1999 Gallup poll found that only 48 percent of Americans said they were worried about population growth, down from 68 percent in 1992."

Although the author largely ascribes these shifts to variations in media attention, the size of the shifts raise questions about the reliability of the items.

#### Attitudes Toward National Population Size and Growth.

A variety of polls conducted in the last few decades show that few Americans favor a more populous nation. Two surveys taken in 1965 and 1967 both found that 54 percent of the nation's adults replied affirmatively to the question "What about the rate the US is growing, do you feel this is a serious problem or not?" (Anonymous, 1966; Kantner, 1968). Bouvier has summarized attitudes toward national population size as follows: "For decades, Americans have not had a desire for a larger population. In 1974, 87 percent of respondents in a Roper poll said they did not wish the country had more people. A 1972 poll by the US Commission on Population Growth and the American Future found that 22 percent felt the US population should be smaller than it was then, which was close to 200 million. As long ago as 1947, when the US population was only 140 million, Gallup found that 55 percent of Americans believed the country would be 'worse' off with more people"

(Bouvier, 1999: 4).

Several more recent polls have focussed their entire questionnaires on attitudes toward population. In 1995 a national Roper poll of 1978 adults asked the following question: "The U.S. population was around 150 million in 1950. It is now 265 million. Do you think there are far too many people, somewhat too many people, somewhat too few, far too few, or about the right number of people?" Only 7 percent of those who responded favored a larger population and only 35 percent judged their population sizes as satisfactory. Fifty-eight percent felt that the current size was too large. Further, when asked whether they agreed or disagreed with the statement "Overpopulation is a major national problem that needs to be addressed now," 55 percent agreed (24 percent strongly), 21 percent disagreed, and 20 percent were uncertain. (Bouvier, 1999).

Attitudes Toward Community Size and Growth. Although considerable survey data on attitudes toward world and national population can be found, only fragmentary information is available on attitudes toward size or growth of *sub-national* sectors--the state, county, town or neighborhood. Qualitative and anecdotal evidence suggests that a growth ethic underlies attitudes toward sub-national entities in the USA.<sup>2</sup> One observer notes that "we in the United States are in a culture that worships growth. Steady growth of populations of our towns and cities is the goal toward which the powerful promotional groups in our communities continuously aspire. If a town's population is growing, the town is said to be 'healthy' or 'vibrant,' and if the population is not growing the town is said to be 'stagnant'" (Bartlett, 1997: 89).

Other authorities have further specified the beliefs about population growth. A community planning expert has recently identified twelve alleged beliefs that comprise a "Common Growth Mythology" (Fodor, 1999). The myths concern both demographic and infrastructural growth at the community level. Among the twelve myths are the following:

Growth is inevitable.  
We have to 'grow or die'  
If you don't like growth you're a NIMBY or an Anti (against everything)  
If we limit growth, housing prices will shoot up.  
We must grow to provide jobs  
Growth provides needed tax revenues

Beck (1994) has listed a similar series of pro-growth arguments that he believes are current among Americans.

On the other hand, there are claims that a community level *anti-growth* philosophy is sweeping the country. Writing almost three decades ago, Alonso (1973: 191) argued that "It is remarkable how rapidly the fashion for American states and cities has shifted from a traditional boosterism to a questioning and even an abhorrence of growth...Undoubtedly, this has much to do with a the new Malthusian concern with the consequences of unlimited population growth at national and world levels."

Zovanyi (2000: 3) maintains that "The phenomenal growth in the United States during the latter half of the 20<sup>th</sup> century produced an ideological shift in public perceptions regarding the value of further growth. During the 1960s and 1970s an increasing number of Americans began to question the merit of continued growth."

At the level of community initiatives there is evidence that anti-sprawl forces have been growing. A survey of over 1500 communities in the mid 1980s found that 380 of them had some form of "growth management," defined as "an explicit government program designed to control or influence the rate, amount, type, location and cost of population growth and development within a city, municipality, county, state or region." However, only 17 of these included a limit on population (Ruane and Gray, 1987).

A recent report from the Brookings Institution (1999) has identified thirteen states and 226 local ballot initiatives to rein in suburbia, protect green space, and channel new development. But again it is by no means clear that voters are identifying population growth as a prime mover or its control as a major instrument of planning. Thus, although eleven states have passed growth management laws, all of them "contain provisions intended to promote ongoing growth, and in eight of the eleven, the laws actually mandate ongoing growth accommodation by local governments...The growth management movement, in short, represents a wholehearted endorsement of ongoing growth accommodation" (Zovani, 1999).

New Survey Data. In order to throw some light on the question of public attitudes, a survey of New York State households was undertaken in 2000, assessing knowledge and attitudes toward demographic aspects at the level of community, county, state, nation and world. The survey was conducted under the auspices of Cornell University's Department of Rural Sociology, and entailed a twenty minute telephone interview with male and female adults from 900 households. One thousand fifty-eight telephone contacts were made, of which 85 percent resulted in completed interviews. The New York City firm of Schulman, Ronca and Bucuvalos carried out sampling and questionnaire administration, employing a random digit dial sample of New York City and upstate communities. The sample was intended to draw adequate numbers from each of three census designated types of counties in New York State: metropolitan, non-metropolitan, non-agricultural, and non-metropolitan agricultural. Non-metropolitan counties were over sampled in a ratio of 25 to one. Because of the large population living in New York City counties, weighting the present data set in order to obtain statewide estimates would mean weighing the metro households 25 times that of the non-metro counties yielding, in effect, a city sample. Consequently we have not weighted the sample, but will hold residence constant where appropriate.

Some General Findings. Only about one-third believe that population growth will help economic development; and most (81 percent) feel that local population growth is more harmful than helpful to the environment. Only 5 percent would like to see a higher density of population in their neighborhoods and only 13 percent and 14 percent believe a larger population would be good for their town or county. About half would prefer to live in an open country rural area if given the choice, and another one-third would prefer living in "a small community." Most people (77 percent) believe that the cost of housing will rise as growth occurs, and a majority (58 percent)

believe that as the number of houses rises, taxes will rise. However, the sample is evenly split (46 percent to 46 percent) on the question of whether government should be dealing with problems of growth; and when *local* government intervention is specified, even fewer would support it. Only 27 percent say their town or county should do something about the way population is distributed in their community.

Attitudes Toward population Size. A block of questions assessed satisfaction with the population size of various social or political units ranging from the optimum size for the respondent's neighborhood to the optimum size of the world. Although the question wording varied somewhat, in all cases the item asked whether population size or density was "about right" or would be better "if larger or smaller."<sup>3</sup> Table 1 shows that satisfaction with size declines as we move from the neighborhood to the world, from three-quarters who find their neighborhood density "about right" to less than one-third who believe the world has the right number of people. Most of the dissatisfied would prefer a smaller size for their state, nation or world, but opinion is about evenly divided for town or county. However, of the minority who are dissatisfied with their neighborhood population, only a minority would prefer a lower density.

Table 1. Attitude toward population size or density of various localities

	Percent "just about right"	Percent "smaller"	Percent "smaller" of (smaller+larger)
Neighborhood Density	78	18	20
Town Size	69	13	54
County Size	69	13	47
State Size	57	28	78
Nation Size	48	38	85
World Size	30	65	98

Is there a general attitude about population size that pervades all these geographic areas, i.e., does concern about the size or growth of one area predict concern about the others? Cross-tabulating the three-category attitude items for five areas (town, county, state, USA, world) results in Chi Squares that are significant at less than the .001 level for nine of the ten comparisons and significant at the .05 level for the tenth.

For example, Table 2 shows that attitude toward one's town population size is significantly related to attitudes toward county, state, national and world population. However, the relation becomes weaker with each step removed from the town. Thus, the relations between attitude toward town size and attitude toward world or national population size are weaker than the relation between

town size attitude and attitude toward state or national size.

Table 2. Percent who believe their county, state, nation or world are too big, by preference for size of respondent's town

	Prefers Town Larger	Prefers Town Same Size	Prefers Town Smaller	Pearson Chi Square
Percent say too big	4	8	43	200***
State too big	15	27	41	34 ***
Nation too big	31	36	52	17 ***
World too big	67	66	79	9 **

\*\*= Chi Square <.01, .\*\*\*= Chi Square <.001

Despite the substantial preferences for stable or smaller populations a comparison of two questions regarding New York State population shows that such preferences may not be strong or salient. When respondents were asked whether, in the last ten years, New York State had gained, lost or maintained its population size, 20 percent said it had stayed the same or said they did not know, 38 percent said that it had lost population and 42 percent that it had gained it. This question was followed by "Has that been mostly good for the state, bad for the state, or hasn't it made much difference?" Although Table 1 showed that 28 percent of the sample favored a smaller New York State, Table 3 shows that virtually no one who perceived a decennial state loss in population believed it was good for the state, and a large majority felt it was bad. This may be compared with those who believe the state has been growing: only one-third of them believe the growth was bad, and a large proportion--43 percent--regarded the growth as harmless.

Table 3. Attitude toward NY State population growth, by perception of change in population size in past decade, in percent

	Perceive state population loss	Perceive no population change	Perceive population gain
Good for state	3	16	24
No effect on state	24	66	43
Bad for state	72	18	33
Total	99	100	100

Other items also suggest weak or ambivalent attitudes. Although 38 percent felt the nation's population would be better off if smaller, when asked whether the government should take steps to slow America's population increase, speed it up or leave it alone, 72 percent said "leave it alone." (Nine of every ten of the remaining cases said the government should slow the increase.)<sup>4</sup> Referring to their local governments respondents were asked "should government be dealing with problems of growth or should government not intervene with growth?" Just over half said the government *should not* intervene.

Attitudes Toward Size and Growth. Table 4 relates attitudes toward town size with attitudes toward several aspects of town growth. Those who favor a larger town size are more opposed to local growth on all three measures of attitude toward growth. However, the correlations are only moderate in size ( $r = .13-.21$ ) and suggest that for a substantial number of people attitudes toward growth and size do not correspond.<sup>5</sup>

Table 4. Attitudes toward town growth by attitude toward town size

	Prefer larger town	Town size ok	Prefer smaller town	Chi Square	r
Oppose suburban growth (%)	27	55	53	44	.21***
Faster growth hurts local economy (%)	27	38	35	30	.16***
Faster growth hurts local environment (%)	68	82	86	19	.13**

Population Knowledge. In order to ascertain the public's awareness of population size, we asked: "I'd like to ask you to estimate the size of some populations. If you don't know, take a guess. How many people would you say live in your town? How about the county as a whole? What would you estimate the population of the USA to be? And what about New York State?" Later in the questionnaire we asked "Now I'd like to ask you about world population. Roughly how many



people do you think there are in the world?"<sup>6</sup>

Twelve percent of the sample would not venture an estimate of their town population, 29 percent could not or would not answer the questions on state or nation, and 32 percent did not give a number for world population. Only 60 percent were able and willing to give numerical responses to all three questions. Of those who did respond, only a minority came close to the official counts of state, nation or world population. U.S. Census estimates placed New York State's population at 18.2 million in year 2000. Only one-quarter of those who volunteered a number came within five million of this figure. Over one-third (36 percent) of those who responded placed it under three million or over one hundred million. In the case of the nation's population of 275 million, only about one-third (31 percent) gave a figure between 200 and 350 million, As many as 39 percent of those who gave a number, cited a figure under 30 million or over two billion. Of the cases that responded to the world population question, only one-fifth (21 percent) placed it within one billion of its approximately six billion. One-third placed it under five billion or over 30 billion.

In addition, respondents were asked whether they had ever heard of the terms "smart growth" and "urban or suburban sprawl." Seventy-two percent said they had not heard of the former term and 42 percent had not heard of the latter. Only 15 percent recognized both terms, while 33 percent recognized neither.

Are the knowledge items related? Is there a general knowledge factor? Because of the large number of DKs we designed three measures for each of the population knowledge items (state, nation and world). The first measure scored DKs as 0, highly erroneous estimates as 1, moderately erroneous as 2 and the most accurate as 3. (Range = 0-3) In the second measure DKs and highly erroneous were grouped as 1, and other responses as above (Range = 1-3); In the third measure DKs were excluded from the calculations (Range = 1-3)

When the three measures were intercorrelated for the three knowledge items (state, nation, and world), all nine correlation coefficients were statistically significant, with r's ranging from .30 to .67. The three correlations (averaging .60) between knowledge of state and knowledge of US population are higher than correlations between knowledge of world population and New York State ( mean = .44) or world and US population (mean =.47). It is also the case that the three population knowledge measures are moderately correlated with knowledge of the terms "smart growth" and "urban or suburban sprawl" (r's = .22, .22 and .26), indicating some tendency for those who are generally better informed to be better informed on population. In short, however, there does seem to be a "demographic sophistication" characteristic. Correct perceptions of the population size of one geographic unit usually means correct perception of others.

Correlates of Knowledge. What variables predict knowledge? The bivariate correlations and means shown in Table 5 fall into three groups: (1) variables with no statistically significant relation to knowledge--only county population growth over the past decade is in this category; (2) variables with weak but significant positive relations were age, population density and urban residence;<sup>7</sup> and (3) variables with relatively strong positive relations--male sex, higher education, higher income, and political activism.

Women are twice as likely as men to answer "DK" on each of the three population knowledge questions (for example 41 percent of the women versus 21 percent of the men on world

population). This might suggest a greater tendency toward reticence on the part of women. However, even if we eliminate the DKs from the calculation, men score much higher. Thus, 44 percent of the males but only 18 percent of the females who responded to the question on US population size scored a "3" (within the correct range). The comparable figures for knowledge of NY State population were 34 percent and 25 percent, and for world population 24 versus 17 percent.

Table 5. Correlates of population knowledge

	<u>State</u> <u>(statp1dk)</u>		<u>Nation</u> <u>(usp1dk)</u>		<u>World</u> <u>(wrldp1dk)</u>		<u>Knowledge Index</u> <u>(knowtot)</u>	
	<u>Mean</u>	<u>R</u>	<u>Mean</u>	<u>r</u>	<u>Mean</u>	<u>r</u>	<u>Mean</u>	<u>r</u>
<b>Sex</b>								
Male	1.8886		1.9282		1.6862		5.4769	
Female	1.4165		1.4375		1.4229		4.2606	
Total	1.6282	-0.3060	1.6578	-0.2978	1.5449	-0.1838	4.8245	-0.3263
<b>Education</b>								
Low	1.4597		1.4474		1.3611		4.2377	
High	1.7700		1.8313		1.7032		5.3316	
Total	1.6283	0.2389	1.6559	0.2699	1.5444	0.2882	4.8238	0.3352
<b>Type of Area</b>								
Non-Metropolitan	1.6009		1.6143		1.4929		4.7108	
Metropolitan	1.6965		1.7665		1.6667		5.0905	
Total	1.6282	0.0562	1.6578	0.0839	1.5449	0.1114	4.8245	0.0936
<b>Density</b>								
Low	1.5979		1.6032		1.4728		4.6525	
High	1.6796		1.7508		1.6547		5.0863	
Total	1.6282	0.0479	1.6578	0.0958	1.5449	0.1064	4.8245	0.0942
<b>Income</b>								
Under \$35000	1.4508		1.4808		1.4317		4.3882	
\$35000 and OVER	1.8480		1.8554		1.6698		5.3333	
Total	1.6473	0.2738	1.6663	0.2325	1.5505	0.1730	4.8600	0.2698
<b>Activote</b>								
Low (1-3)	1.4613		1.4820		1.4650		4.3636	
High (4-6)	1.7548		1.7835		1.6060		5.1671	
Total	1.6346	0.2207	1.6602	0.2142	1.5473	0.1161	4.8326	0.2393
<b>Age</b>								
Below 40	1.4879		1.4826		1.5649		4.5481	
40 and above	1.7116		1.7509		1.5395		5.0045	
Total	1.6377	0.1076	1.6625	0.0992	1.5484	-0.0841	4.8446	0.0640
<b>Population</b>								
Low	1.6079		1.6992		1.5270		4.8211	
High	1.6576		1.5978		1.5700		4.8294	
Total	1.6282	0.0418	1.6578	-0.0588	1.5449	0.0014	4.8245	-0.0118

Knowledge and Residence. By "Rural" we refer to residence in counties that are either non-metropolitan agricultural or non-metropolitan non-agricultural as defined by the census. "Urban" will refer to metropolitan communities. Urban dwellers were not only more likely to respond to the three knowledge questions, but, if they responded, were more knowledgeable about the size of the US and world population. After deducting the "Don't Knows" from the bases, only 16 percent of rural but 30 percent of the urban respondents gave correct (category 3) responses to the question asking for estimates of world population size. Differences were smaller for estimates of other areas, and the urban residents were no more likely to have heard of urban sprawl or smart growth. Thus, superior urban knowledge may be specific to population rather than a more general characteristic of the urban population.

The Relation of Knowledge and Attitudes. "Population Education" constitutes a major component of many population programs. A common assumption is that correct demographic information will promote demographic concern, which in turn will affect demographic behavior. Thus, after survey data demonstrated the American public's ignorance of basic demographic facts, the 1972 Report of the Commission on Population Growth and the American Future (1972: 124) posited a need "to educate future generations, enabling them to make more intelligent *decisions* with regard to population matters."<sup>8</sup> (Emphasis added). Or, as the then Executive Director of the UNFPA, Rafael Salas, put it "...in the final analysis it is better understanding which is the key to action." But can the knowledge-attitude-action nexus be taken for granted? In a survey of 1150 upstate New Yorkers, Stycos and Pfeffer (1998: 389) found that "knowledge is at best unrelated to measures of concern about population and, even shows a slight tendency to be associated with lower concern." The present survey provides a second attempt to test the relation, with more extensive attitude measurement, and a more representative sample of New York State households. We cross-tabulated knowledge with attitude items for the state, the nation and the world. In the tables concerning the state and nation the Chi Squares did not approach significance. While the Chi squares for the relation between attitude toward and knowledge of world population size was significant ( $<.001$ ), the relation was non-linear; i.e., those groups most satisfied with US population size were the DKs (63%) on the one hand, and the *best* informed (58 percent) on the other. We further created a combined index of knowledge of state and national population, and cross-tabulated it with attitudes toward county, state, national and world population size. In none of the tabulations was the Chi Square significant. There is no evidence from our survey that better knowledge is associated with more concern about population size.

Multivariate Analysis. Better to untangle the determinants of knowledge and attitude, we carried out a series of Multiple Classification Analyses (MCAs). As potential correlates of knowledge we included sex, education, political participation, residence, and income, as well as two contextual variables (county population density and growth rate). Age was treated as a co-variate. The dependent variables were knowledge of population size for the state, nation and world. When a summary measure of knowledge was used, eight independent variables produced an  $R^2$  of .27. The strongest predictors were sex ( $F=78$ ) and education ( $F=20$ ), followed by political activism ( $F=3$ ) and income ( $F=6$ ). Age, residence and the two contextual variables did not reach statistical significance. If we use as dependent variables the individual components of the summary

knowledge measure (state, nation and world population knowledge), the results are roughly the same.<sup>9</sup>

A similar MCA analysis was used to explain seven attitude measures.<sup>10</sup> Several differences are noteworthy. First, the  $R^2$ s are much lower than was the case for knowledge, ranging only from .04 to .11. Second, the variables that were the strongest predictors of knowledge (sex, education, income, and political activism) fail to reach significance in predicting attitudes. Residence shows the highest F values in explaining attitudes toward local, state and national population, followed by general attitudes toward the environment. In explaining attitudes toward world population, the only significant predictor is attitude toward the environment.

Summary and Conclusions. (1) There seems to be a general “demographic sophistication” factor since correlations are moderately high among population knowledge levels for state, nation, and world. (2) The best predictor of population knowledge was gender, followed by education. Multivariate analysis does not diminish the importance of either characteristic. (3) Although knowledge of the population size and rates of growth of NY State, the USA and the world is markedly deficient, superior knowledge shows no relation to concern over population size or growth. (4) The strongest predictor of concern about population is residence—urban residents are more concerned than rural residents about local, state and national size. (5) A lesser but significant predictor of population attitudes is general concern about environmental problems, especially where attitudes toward world population are concerned.

A number of the findings raise interesting questions. Why should women have such high rates of both error and failure to respond to factual demographic questions? Why is there no relation between demographic knowledge and population concern? Why is concern best predicted by rural/urban residence? And why is population knowledge better explained by the contextual and social variables than is concern about population?

Regarding the last question, some of our data, in combination with national polling data over time, raise disturbing questions about the reliability and validity of interview items used to assess population concern. Despite considerable evidence of widespread concern about national, state and local population growth, New Yorkers are also concerned if they perceive that their state is not growing; and, while they largely favor US assistance for population management in other countries, they are much less approving of government efforts to affect population trends in the USA. Moreover, the dramatic swings in opinion that we have seen typify national poll type data may reflect media shifts or events that affect public concern about population issues, but they may also reflect weak or ambivalent attitudes that require better survey questions.

## CITATIONS.

- Adamson, D.M., N. Belden, J. DaVanzo and S. Patterson. 2000. "How Americans View World Population Issues," Population Matters. Rand Corp.
- Alonso, W. 1973. "Urban Zero Population Growth," in The No Growth Society, M. Olson and H.H Landsberg (eds.). New York: WW Norton.
- Bartlett, A.A. 1997. "Is There a Population Problem?" Wild Earth
- Beck, R. 1994. Recharting America's Future. Petoskey, MI: Social Contract Press.
- Belden and Russonello. 1994. "Report of Findings from a National Survey on Population, Consumption, and the Environment." Washington, D.C.
- Bouvier, L. 1999. "Americans Have Spoken." NPG Reports.
- Brooke J. 1995. "Colorado Tries to Keep Lid on Population." NY Times, November 5.
- Brookings Institution 1999. "Livability at the Ballot Box" Special Report
- Brown, D.L., G. Fuguitt, T.B. Heaton, and S. Wassen 1997. "Continuities in Size of Place Preferences in the U. S., 1972-92," Rural Sociology, 62:4: 408-425.
- Erskine, H. 1967. "The Polls: More on The Population Explosion and Birth Control," Public Opinion Quarterly 30(3).
- Fodor E. 1999. Better Not Bigger. British Columbia, Canada: New Society Publishers.
- Gallagher, J. 1999. "The Rise and Fall of the Empire State." "Working-Age Population Shrinking in NY." "Migrating New Yorkers Stunt Upstate Growth." Ithaca Journal. January.
- Harris, Louis and Associates. 1989. "Public Leadership Attitudes Toward the Environment in Four Continents". Study 884002. N.Y.
- Hetrick, C.C., A.E. Nash, and A. Wyner. 1972. "Population and Politics: Information, Concern and Policy Support Among the American Public." Commission on Population Growth and the American Future, Vol. IV.
- Mindick, B. 1977. "Attitudes toward population issues," in S. Oscamp (ed.), Attitudes and Opinions. Prentice Hall. Cited in T Schindlmayr, 2001, "The Media, Public Opinion and Population Assistance: Establishing the Link," International Family Planning Perspectives 27(1).
- Molotch, H. 1980. "The City as a Growth Machine: Toward a Political Economy of Place," American Journal of Sociology, Vol. 82, No. 2.

National Audubon Society. 1994. "Population and the American Future--Twenty Years Later." Boulder, Colorado.

Porter, D. 1997. Managing Growth in America's Communities. Washington, DC: Island Press.

Rindfuss, R. 1972. "Recent Trends in Population Attitudes". Commission on Population. Growth and the American Future.. Vol. VI, Chapter 14

Ruane, E.T. and R. J. Gray. 1987. "Community Responses to Population Growth and Environmental Stress: Population-Environment Balance, Inc." Washington, D. C.

Salas, Rafael.

Schindlmayr, T. 2001. "The Media, Public Opinion and Population Assistance: Establishing the Link," International Family Planning Perspectives 27(1).

Stycos, J. Mayone. 1996. "Population and the Environment: Polls, Policies, and Public Opinion," Population and Environment 18(1).

Stycos, J. Mayone and Max Pfeffer. 1998. "Does Demographic Knowledge Matter? Results of a Poll in the NYC Watershed," Population Research and Policy Review 17: 389-402.

Wolman, Dianne Miller. 1972. "Findings of the Commission's National Public Opinion Survey," in E. Morss and R H. Reed (eds.) The Commission on Population Growth and the American Future Volume VI.

Zovanyi, Gabor. 1999. "The Growth Management Delusion." NPG Forum, 89.

Zovanyi, Gabor. 1998. Focus for Growth Management for a Sustainable Future: Ecological Sustainability as the New Growth Management for the 21<sup>st</sup> Century. Praeger.

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<sup>1</sup> A National Fertility Survey also found that 80 percent of 5,617 women agreed with the statement that global growth constituted “a serious problem (Rindfuss, 1972). However, a different sample with a somewhat different question produced different results. A 1965 national Gallup sample asked “Are you worried or not worried about (world population) increase?” Sixty-five percent said they were not worried (Erskine, 1967).

<sup>2</sup> The National Audubon Society claims that “everywhere we look we see messages from (the neo-economists) telling us that growth is good—growth in business, growth of communities, growth of the economy” (Rosseau, 2000: 1). New York State provides a good example. The captions used in a series of articles for the Gannett newspapers illustrate the concern about the slow rate of population growth in the State: “Vanishing Population;” “As America Grows New York Shrinks;” “Migrating New Yorkers Stunt N.Y. Growth.” The article cites a conclusion reached by a report sponsored by the NYS Bankers Association: “Poor demographic trends...is one of the weaknesses of the state’s economy” (Gallegher, nd).

<sup>3</sup> The questions were as follows: “I’d like to ask you some questions about the town and county you live in. Would you say the population of your town is about right, or would a smaller or larger population be better? What about the county population (as above). And New York State as a whole, would it be better larger, smaller, or is the population size about right? What about the nation, do you think the size of the U.S. population is about right or would it be better if it were smaller or larger? Thinking of your neighborhood, would you like to see a higher or lower density of population, or is it about right? In your opinion is the world overpopulated, under-populated, or would you say there are about the right number of people in the world?”

<sup>4</sup> We followed the item on national growth policy with the question “Would it be better to slow immigration to the U.S., encourage smaller families, or both?” Of the minority who had said the government should slow national growth, 46 percent favored less immigration, 13 percent preferred encouraging smaller families, and 41 percent chose “both.”

<sup>5</sup> To create more reliable attitude measures, we combined the scores for attitudes toward county and town population size, thereby yielding a measure of “local” size attitudes. Likewise, we combined the three items from Table 4 concerned with local growth. Town size preferences were scored as 1 (prefer larger), 2 (ok), 3 (prefer smaller). The latter two growth items were also scored as 1-3 (1=growth is good, 3=growth is harmful). Attitude toward suburban growth was scored as 0 (in favor of suburban growth) and 1 (opposed). Although the correlation coefficient relating the two size and growth indices is highly significant and substantial ( $r=.28$ ), it also tells us that many respondents express different attitudes toward growth and size.

<sup>6</sup> Due to an error in the interviewing process, 12 percent of the sample (106 cases) were not asked the question on world population. They do not differ in their personal characteristics from the rest of the sample.

<sup>7</sup> Residents of the more agricultural counties average lower incomes and lower educational levels than the residents of other non-metro counties, and have also lived in their counties for a longer period. However, on other characteristics—religion, church attendance, political party preference, voting behavior, and gender—they show no significant differences. Moreover, the more agricultural counties showed virtually no significant differences from non-agricultural non-metro counties on the many measures of population knowledge and attitude. Consequently, we grouped these counties with the other non-metro counties and term their households “rural” for comparison with the “urban” (i.e., metropolitan) counties. By these definitions, urban residents have better education and incomes, are more likely to be Catholic and favor the Democratic party.

<sup>8</sup> Although the Commission recognized that “Population education involves more than simply learning the size of different populations,” it argued that “If information on such elementary facts is missing, one can imagine the state of more advanced knowledge and understanding.” (124)

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<sup>9</sup> The exception is knowledge of world population size, where the F for education (28) is considerably stronger than for sex (F=18).

<sup>10</sup> The contextual variables, which showed no relation to any of the attitude measures, were not included in the MCA analyses. Religious affiliation was also unrelated to any of the attitudes.