

GROUP SIZE AND CONTRIBUTIONS  
TO COLLECTIVE ACTION:  
A TEST OF MANCUR OLSON, JR'S THEORY  
ON ZERO POPULATION GROWTH, INC.

Dissertation for the Degree of Ph. D.  
MICHIGAN STATE UNIVERSITY  
HARRIET EVELYN TILLOCK  
1976



This is to certify that the

thesis entitled

GROUP SIZE AND CONTRIBUTIONS  
TO COLLECTIVE ACTION: A TEST  
OF MANCUR OLSON, JR'S THEORY  
ON ZERO POPULATION GROWTH, INC.

presented by

Harriet Evelyn Tillock

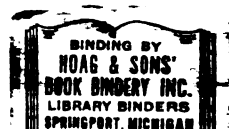
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Major professor  
Denton E. Morrison

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# ABSTRACT

## GROUP SIZE AND CONTRIBUTIONS TO COLLECTIVE ACTION: A TEST OF MANCUR OLSON, JR'S THEORY ON ZERO POPULATION GROWTH, INC.

By

Harriet Evelyn Tillock

This study tests Mancur Olson Jr's theory that member motivations to contribute in collective action settings differ according to group size. The central notion of the theory is that incentives to contribute in large groups depend heavily upon the receipt of private goods available only to contributors but, in small groups, contributions are motivated primarily by a desire to achieve some larger public good.

Olson's group size and public or private goods incentive concepts are operationalized and general hypotheses generated from them. Public and private goods incentives are refined, a contribution index is constructed, and indices to measure the value of the incentives are developed. More specific hypotheses are generated relative to these concepts.

The hypotheses are tested on Zero Population Growth, Inc., a social movement organization arising from the more general environmental movement. Data for testing are derived from responses to

questionnaires mailed to a national stratified (disproportionate) random sample of members of this organization.

Comparisons of the mean value of incentives between small and large groups constitute the tests of the hypotheses. Results support Olson's theory in less than half the tests; therefore, his theory is not supported by this study.

Results also indicate that public and private goods incentives are inextricably mixed in social movement organizations and possess a "moral" component which itself may be a primary incentive for contributing to collective action. It is concluded that the relative value of the public good seems to transcend group size and immediate, personal "gain" components of Olson's theory. Further research is suggested to answer some of the questions raised by this study, including whether or not the relative value of the public good is the driving force behind contributions to collective action in social movements.



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Harriet Evelyn Tillock

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Sociology

1976

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1976

DEDICATION

To the memory of my mother

Harriet Long Fleck

who taught me to seek the  
answers to my questions.

## ACKNOWLEDGEMENTS

A study like this would be impossible without the assistance of many people, and it is to those who have made this research possible that I now give a very special tribute.

Robert A. Tillock DDS, my husband, whose continued support and encouragement sustained me throughout.

Denton E. Morrison PhD, my chairman, whose ideas meshed with mine to focus on the original problem and whose critical guidance and insistence upon clarity kept the entire study in focus.

Denton E. Morrison PhD, Stan Kaplowitz PhD, Barrie Thorne PhD, and James E. Zuiches PhD, members of my committee whose interest and assistance aided immeasurably in the completion of this research.

Santo F. Camillari PhD, for advice on the quantitative analysis to be used in the study.

Members and staff of the Department of Sociology, Michigan State University, for assistance at all stages of the research, and for provision of computer services needed for data analysis.

Linda Buttel for invaluable aid in producing the data analysis needed for the study.

Robert Dennis, Adam McLane, Larry Mires, John Tanton MD, and the other staff members and directors of Zero Population Growth, Inc., for their assistance at all stages of the research.

Larry Barnett PhD, for making the results of earlier surveys available to me and for the advice and suggestions he freely offered.

Robert S. P. Yien PhD, Chairman, Department of Sociology, Saginaw Valley State College, for his unfailing support and aid.

Administration, Faculty and Staff of Saginaw Valley State College for their assistance and encouragement.

Gary Shepherd PhD, for his invaluable aid in editing.

Janice Fuller and Joyce Wixson for their careful typing.

Special appreciation for financial assistance to Michigan State University College of Social Science for the Biomedical Science Support Grant, Michigan State University Faculty Women's Association for the Research Grant, and Saginaw Valley State College Professional Practices Committee for the Professional Growth and Development Grant.

The members of Zero Population Growth, Inc., who took time to fill out and return the survey questionnaires, and without whose assistance this study would have been impossible.

All the members of my family and Him Whose aid assures success.

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## CHAPTER 1

### INTRODUCTION, PROBLEM, THEORETICAL FRAMEWORK AND RELEVANT LITERATURE

#### INTRODUCTION AND STATEMENT OF THE PROBLEM

A persistent problem for all voluntary organizations is to induce member contributions. The strategies employed by voluntary organizations to obtain contributions vary greatly, as does the degree of success which these strategies produce. In every case, however, the one problem remains central to all voluntary organizations: how to provide people with some "good" that is sufficient to elicit and maintain contributions. This general problem becomes even more difficult to resolve within that class of voluntary organizations grouped under the rubric of "social movements." The peculiar difficulty for social movements is that the ultimate goals of many social movement organizations go beyond the mere satisfaction of member needs to the larger realm of "public good"; i.e., to provide some presumed benefit for people in general, not just for contributing members of the movement.

This general problem of producing incentives for member contributions in voluntary organizations, particularly in social movements which seek "public goods", will constitute the major focus of my study. In this initial chapter I will attempt to clarify what I view as the central issues related to generating collective action,

or member contributions, by (1) identifying and summarizing a theoretical framework which appears to be most useful in dealing with the problem, (2) reviewing those studies in the general literature which have the greatest relevance for both various aspects of the problem and the theory I have chosen to apply to the problem, and (3) briefly summarizing the specific social movement organization which will serve as the data source for testing hypotheses derived from the theory.

#### SELECTING A THEORETICAL FRAMEWORK

##### The Olson Model of Collective Action

Among the many explanations for collective action that have been offered, perhaps the most cogent and explicit (but relatively untested) is the rational, economic model developed by Mancur Olson Jr in *The Logic of Collective Action* (1971a).<sup>1</sup> Olson's model is intended as an alternative to traditional "interest group theory", i.e., the commonsense idea that people act collectively when it is in their common interest to do so. Instead, Olson focuses upon specific group incentives for action. Olson's major hypothesis is that member motivations to contribute in collective action settings differ according to group size. In "large groups", according to Olson, contributions depend heavily upon the receipt of private goods available only to contributors. In "small groups", however,

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<sup>1</sup>Olson's model is mostly elaborated with regard to collective action in the economic sphere. However, Olson does intend his model to be interpreted as a general one, and thus it should be applicable to any case of collective action.

contributions are motivated primarily by a desire to achieve some larger public good.

By definition, "public goods" are available to every member of the group whether or not that individual has made a contribution. Obviously costs are involved in production of that "good." Olson is convinced that shares received by contributors are larger and costs are less in small groups. The reverse is true in large groups, since organization is required for production in larger groups and marginal organizational costs raise the total cost per share. In addition, shares tend to be smaller in large groups. So, according to Olson, only in small groups are the costs low enough and shares received large enough to provide sufficient incentive to contribute. In large groups, "private goods" (available only to contributors) must be provided as supplements to the "public good" in order to provide incentives for member contributions to collective action.

#### Usefulness of Olson's Theory for Purposes of This Study

Olson's theory attempts to explain why it is that individuals so often fail to act collectively, even when it would be in their own best interests to do so. Olson's approach should be especially useful in examining behavior in social movements, because social movements generally arise from large groups sharing a common interest. As Olson points out, few, if any, large "latent" interest groups do actually act collectively as traditional "interest group" theorists would suggest. Thus, if Olson's theory

can produce empirical support, it might help explain why social movement type interest groups often do not act collectively.<sup>2</sup>

The theory should also help integrate other concepts and studies related to social movements. For instance, the growth and decline cycle in social movement organizations has often been noted. Various explanations for this cycle have been proposed, including positing relationships between the organization and the larger society or its institutions, intra-organizational processes such as goal displacement or oligarchy, membership characteristics, etc. What has received less attention is the *basis of membership support* of a social movement organization, especially during a period of leveling or decline. In contrast to other theories, Olson might argue that fluctuations in the types of incentives to contribute and/or in the size of the groups would influence the direction of the observed cyclic changes. Thus, relative to the basic membership support for organizations, Olson's model has potential for expanding explanations of the cyclic nature of social movement organizations.<sup>3</sup>

Olson's theory might suggest reasons why participation in voluntary associations is not extensive, as is generally assumed. Studies indicate that less than half of the population belong to

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<sup>2</sup>The general notion that group size determines certain behaviors has long been a widely held tenet in social science, but the effect of group size on incentives in collective action has not been treated directly. Empirical support of Olson's theory would provide guidelines for inducing more frequent collective action, especially for groups like the "silent majority" whose interests are presumably not now being considered.

<sup>3</sup>This matter will not be considered directly in this study.

any group designated as voluntary (including unions and churches), and only 20 percent of these people are actively involved (Sills, 1968:365). No really adequate explanations have been offered for this low rate of participation. Olson does offer an explanation for differential participation in any collective action; i.e., incentives are dependent on group size, and decisions are made on the basis of individual maximization of profit. Assuming (as Olson does) that adequate resources are available for contributions, differential participation in social movements could be explained on the basis that social movement organizations must generally provide "private" incentives since they are large groups, and these incentives have differential value as incentives to individuals.

THE SOCIAL MOVEMENT ORGANIZATION USED AS  
DATA SOURCE FOR TESTING OLSON'S MODEL

The social movement organization that I have chosen as a test of Olson's model is Zero Population Growth, Inc. (hereafter designated as ZPG)--a currently on-going group that has emerged out of the more general "environmental movement." The environmental movement bloomed in the late sixties, peaked about 1970-1971, and since then has receded somewhat in visibility in American society (Hornback, 1974). ZPG itself was incorporated in 1968, reached a peak membership of 37,000 in 1971, then stabilized at its present membership of about 12,000. Thus, ZPG clearly represents a social movement organization undergoing the growth and decline cycle referred to above.

ZPG consists of autonomous chapters of various sizes chartered by the national organization. Chapters may have local goals different from, or supplementary to, those of the national organization. Members may belong to local chapters or affiliate only with the national group. Variations in chapter size, and in local or national affiliation, suggest representations of the small and large group divisions needed to test Olson's model. An additional important advantage of studying an organization comprised of different size sub-groups is the ability to control for the possibility that differences in organizational goals might influence incentives, and so not provide a clear test of the effect of group size upon those incentives to contribute to collective action. More specific details concerning ZPG and the methods employed to collect data for testing Olson's model will be discussed in Chapter 3.

Meanwhile, it should now be helpful to further elaborate the main issues this study is concerned with by briefly reviewing some of the literature that already exists that is directly relevant for incentives and/or contributions in voluntary organizations generally and social movement organizations particularly.

## REVIEW OF RELEVANT LITERATURE

### General

The intent of the following literature review is to bring together those empirical studies and theoretical ideas that have some implication for the Olson incentive-contribution model of collective action (i.e., incentives to contribute differ by group size). Much of this literature does not approach the clarity of



the concepts and hypotheses developed by Olson. Nevertheless, these studies do produce enough conceptual overlap to accomplish at least two things: one, to establish that Olson's model is in fact applicable to some of the central issues and ideas that must be dealt with in the study of social movements; and two, to provide clues for the possible elaboration of Olson's model.

#### Voluntary Organizations in General

Collective action within a voluntary organizational framework has been of deep interest to social scientists in all disciplines for many years, and there exists a voluminous literature on the subject.<sup>4</sup> The limited intention of my review here will be to consider only literature that has some bearing upon incentives to contribute to collective action--the basic element of Olson's model and the focus of the present study.

In the social sciences, general usage of the term "voluntary associations" refers to a structured, formally organized, relatively permanent grouping to which people belong by choice. For example, voluntary organizations are usually considered to be non-profit and not connected with a government. In addition, voluntary organizations generally have a formal structure with offices filled in a specified manner, by-laws or constitutions, scheduled meetings, and

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<sup>4</sup>For extensive reviews of this literature see: Constance Smith and Anne Freedman, *Voluntary Associations: Perspectives on the Literature* (Cambridge, Mass.: Harvard University Press, 1972) and the two volumes edited by David Horton Smith, *Voluntary Action Research: 1972* and *Voluntary Action Research: 1973* (Lexington, Mass.: D. W. Heath and Company, 1972 and 1973).

criteria for membership (Smith and Freedman, 1972: viii-ix; Harp, 1973: 4).

Traditional "interest group" theory tends to assume that formation of a voluntary organization occurs only to further the collective interests of its members. However, it is clear that many interest groups may function not only in ways beneficial to individual members, but also in ways beneficial to society in general. Thus, incentives for participation in such groups must be "public" as well as "private." For instance, Smith and Freedman (1972: 33-85), in their review of the literature on voluntary organizations, emphasize a number of functions and dysfunctions of interest groups in a democratic society; some of these can be implicitly viewed as underlying the bases of incentives. The most relevant of these "functional" incentives include the following: (1) Interest groups prevent the arbitrary exercise of power by governments and/or elitist groups; i.e., they counteract the concentration of power described by Michel's "Iron Law of Oligarchy." (2) Groups provide a framework for expressing an individual's interests so that interests are not only articulated and considered, but also so that antagonistic interests can be negotiated and controlled in an orderly manner which will not disrupt the society. (3) Whenever the need arises, interest groups can function as special pressure groups to influence the democratic process.

Sills (1968) agrees with Olson that individuals generally do not spontaneously join together to advance their interests, but once they have been encouraged to join a voluntary organization, individuals do benefit from the manifest functions of the

organization as expressed in its program. The program may be designed to satisfy interests ranging from sociability to political action.

Voluntary organizations may act independently to further members' interests or may seek to influence decisions and actions of policy-making bodies. Since the general public is less likely to belong to such organizations than are socio-economically more advantaged people, the latter are more likely to have their interests represented. Although these groups may be less successful than economic or governmental agencies in articulating members' interests, their costs to the individual tend to be relatively small, and they may represent the only avenue open to individuals in expressing their concern over some issue (see Warner, 1973).

#### Social Movements, Social Movement Organizations, and Incentives

Interest groups and voluntary organizations not only respond to change, but of course social movements may initiate change. In this area of the literature, "interest" in the movement is often treated as if it automatically implies membership in an organization. This, of course, need not always be the case. Many persons may have an interest in a particular movement and may even occasionally engage in activity related to the movement "cause" and yet never actually join a formal organization requiring contributions or dues. The environmental movement provides a good case in point; many people were interested in the environmental cause to the extent of joining in "Earth Day" activities or using phosphate-free soaps, but never had strong enough incentives to join environmental movement

organizations. Indeed, this provides a classic example in support of Olson, since the benefits of a less polluted environment do not depend upon the contribution of a particular individual. In short, interest does not *always* mean incentive to contribute.

Nevertheless, private interests within social movements should still be taken into account, because they undoubtedly constitute some *portion* of the total motivation for individual contributions to collective action. According to Milgrim and Toch (1969: 584-585), articulation of the feelings, concerns and hopes of individuals (especially if the movement offers an opportunity to solve perceived problems) is more important to social movement participants than size or organization. Various psychological factors and "need states", especially the need to affiliate and/or the intrinsic value of membership in a group, may provide incentives to participants (Birney, 1968: 519; Berkowicz, 1969: 62-64).

Killian (1964) provides a contrast to the emphasis on individual psychological factors with his argument that participants in movements are heterogeneous in: (1) their interpretation of the movement and its values; (2) their participation in movement activities; and (3) their commitment, which ranges from dedication to passive support. This heterogeneity of members makes it more fruitful to study the interaction in the social movement or its organizations than individual psychological factors.

Much of the social movement literature assumes that the major incentive for membership is based on the professed goals of the social movement organization (hereafter SMO). However, some studies have shown that, although members subscribe to organizational goals,

they often join and/or participate for a variety of non-organizational reasons (Moore, 1961; Minnis, 1952). One particularly good example of this point is provided by Jacoby and Babchuk (1963), who found that while members joined an organization for its specific goal of providing a service or producing a product, many members then remained in the organization because of the activities which they found to be individually gratifying.

Although not specifically related to participants in social movements, relevant here is Smith and Reddy's (1973: 169-237) extensive review of the literature related to the impact of voluntary organizations upon the participant. These authors noted that different types of organizations had different effects upon participants, but concluded that all effects were probably mediated by prior individual experiences or other influences not directly related to the organization. Particularly interesting for present purposes were the following observations: (1) Voluntary organizations are less able to gain membership cooperation because they are generally less important to the individual than family and/or economic involvement. (2) Members' individual levels of involvement and levels of rewards in voluntary organizations vary greatly. Thus, in any one group, impact is directly related to levels of participation and perceived rewards. (3) Some research evidence indicates that individual feelings of happiness or *satisfaction* are enhanced by participation in volunteer activity.<sup>5</sup> (4) In externally

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<sup>5</sup>Phillips (1967) reports a similar finding. Persons engaged in activity from which they are free to withdraw tend to have more positive than negative emotions, and the former are related to participation.

focused, instrumental organizations, impact on the individual tended to decrease willingness to volunteer in all settings, but increase incentives to engage in activities of great personal interest.

The foregoing discussion indicates that incentives per se have not been treated very precisely in the literature. In general, the articulation of members' interests is implied as incentive to join voluntary organizations, and certain rewards (or impacts) received as a result of membership provide incentives to continue membership. As should become more apparent in Chapter 2, Olson's clear emphasis upon specific incentives offers potential for better understanding collective behavior in SMO's.

### Voluntary Organizations

Certain aspects of organizations affect incentives, and therefore it is appropriate to look more closely at what the literature has to say about some of these factors.

Organizations are often typed by the principal activity of the group, i.e., such functions as sociability or production of goods and services (Warriner and Prather, 1965). Organizational goals are the basis of the often-used typology developed by Gordon and Babchuk (1965). In this typology the authors used (1) "expressive" to mean provision of activities gratifying to members, (2) "instrumental" to illustrate organizations providing specific goals, and (3) "instrumental-expressive", the latter combined the other two, since its activities are gratifying to the participants but also are means to external ends.

Social movement organizations differ from other organizations in several ways according to Zald and Ash (1966). Typically, SMO's have goals aimed at changing the society. Purposive (goal directed) incentive structures dominate, although solidary (social activities) incentives may provide a secondary role in the incentive system. Because of the primacy of the purposive incentives, SMO's often have difficulty maintaining member commitment and participation, given the demands of family and occupational roles of members. Most SMO's are "inclusive" since they must rely on a large base of potential support from persons whose goals harmonize with those of the SMO. In "inclusive" organizations members need not be deeply committed; they need only provide general support in most cases and therefore may not have a strong incentive to remain in and/or support the organization under changing conditions. For this reason "inclusive" SMO's must provide incentives to retain member contributions and, in fact, the incentives available to the members may be one of the critical factors in the change and/or survival of the SMO.

Social movement organizations can also be characterized by the correspondence between the components of the organization. SMO's generally fit into either "congruent" or "non-congruent" types. Congruent SMO's are typified either by expressive goals with exclusive membership or instrumental goals with inclusive membership. Within congruent instrumental-inclusive SMO's, the organization provides more incentives for goal directed activities than for interpersonal or social activities. This type of organization must also be able to provide some form of incentive alternative for

members in order to retain their membership in the face of potential competition from other sources, especially other SMO's.

#### Decision Making Relevant to Contributions

As has been noted previously, individuals do not always join SMO's; rather, each person goes through a decision-making process before contributing to collective action. That literature relevant to such decision-making is now presented.

Hirschman (1971) analyzes political processes in organizations, utilizing economic concepts as analytic tools. Hirschman compares options that are available to consumers of goods regardless of whether the goods are produced in market or non-market situations. One option is to "exit" from the organization when the good deteriorates or the price of obtaining it rises. Exit in the deterioration situation occurs first for those with the most surplus or interest. Exit in the rising cost condition occurs first for those with the least surplus or interest. Exit may be difficult or undersirable under certain conditions, and then "voice" (influencing organizational activities) is utilized in an attempt to improve the product. The latter is applicable to the special case in which the group product is a public good which cannot be avoided by member or non-member. Under these conditions, since leaving the group will deteriorate the public good further, the member will remain in the hope of influencing, by voice, the quality of the good he must accept regardless of its quality. Finally, according to Hirschman, loyalty also exists as a factor in determining exit, since it encourages both a demand for voice and retention of membership beyond the point where these



would normally be exchanged for exit. It would follow from Hirschman's formulation that desire, or ability, to influence the quality of the good produced may be part of the incentive which influences the decision to contribute.

Frohlich, Oppenheimer and Young (1971) addressed the problem of individual decision-making as it relates to contributions in producing a common good unobtainable by individual action. They suggest that members often pool their contributions and hire a "political entrepreneur" to assist in providing the common good. The entrepreneur need not necessarily be interested personally in the production of the good, but he does provide the leadership and organization that are often necessary to produce the good. According to this model, an individual assesses the probability that the good will be provided if he contributes. If his contribution will make no difference in the outcome, he will not act. However, if the political entrepreneur can persuade the individual that (a) his contribution will help assure the supply or the quality of the good, (b) his contribution will be pooled with others so that all share in costs, and (c) others will act if he does, then the member may decide to contribute. Decisions between preferred alternatives are made on the basis of expected value to the individual in his unique situation and also on the subjective probability that the outcome will, in fact, be as expected. This model includes the concept that the value of the good differs for each member of the group. That is, given that there is some organization and sharing of costs, members decide on contributions, not on the basis of the size of the share they will receive, but on how much personal benefit will be

realized from that share and/or the probability that the good will be supplied without a contribution. Although the value of the share is emphasized, the model recognizes that benefits may be greater in small groups because of other factors, such as direct interaction with others. However, there is still not explicit expectation that group size per se determines either individual actions or the probability that the good will be provided.

Coleman (1966) discusses the problems with rational decision-making in situations where (1) perfect consensus does not exist, (2) where there may not be benefit of equal value to each participant in an exchange, and (3) where participation of all members is required if the benefit is to be gained. Consensus can be inferred through the operations of such devices or mechanisms as majority or plurality rule in which participants agree to abide by the rule of the majority. When benefits are of unequal value to participants, individuals will generally attempt to obtain that which is of highest personal value. Coleman's final point is that individuals who disagree with a group decision will decide whether to agree or not on the basis of the relative costs and benefits of consent vs. refusal to consent to the action.

#### Incentives and Incentive Systems

Gamson (1975) indicates that neither personal decisions nor interactional factors alone are sufficient explanations for contributions to collective action. According to Gamson, SMO's success or failure is related to multiple factors such as strategies employed by leaders, organizational structure, and the ability to create

loyalty and demand self-sacrifice of the members. However, success is also highly influenced by the ability of the group to offer some form of selective incentives to members and, thus, SMO's without resources for selective incentives may not be able to survive (Gamson, 1975: 142).

Clark and Wilson (1961) relate incentive systems within organizations to a number of factors, including the type of organization, processes within the organization, changes in resources available for incentive purposes, relationships with other organizations, and changes in personal motives within the society. Although resources are usually scarce in SMO's, executives may alter incentives in response to changes in motivations of individual or collective contributors. Incentives for contributions are considered to be the satisfaction of individual motives, especially self-preservation or self-gratification.

Clark and Wilson define categories of incentives as follows:

(1) *Material*, or tangible, rewards: usually either money or objects that are exchangeable for money; are often related to organizational goals. (2) *Solidarity*: intangible and usually not exchangeable for money but include rewards obtained from socialization, identification with the group, status, etc. These incentives are usually independent of organizational goals. (3) *Purposive*: intangible, but based on the goals of the organization which are of value to contributors; usually related to issues, not specific objects, and most often are difficult to define and/or achieve.

Organizations may utilize more than one incentive system, but usually one system is dominant. The dominant system affects

intra-organizational processes and behavior. Purposive organizations have the most problems since their goal is usually more generalized, and means for obtaining the goal can become more salient than the often ill-defined goal itself. Emphasis in purposive groups tends to be on services such as providing information, doing research, and promoting the organization in public relations. Since individuals in American society seem more willing to contribute in response to material or solidarity incentives rather than purposive incentives, these alternative incentives often evolve in purposive type organizations.

It is obvious from this brief review of the literature that incentives play a vital role in encouraging contributions to collective action in social movements, but that the incentive-contribution problem lacks precise formulation. Given this general imprecision, it seems clear that Olson's model of collective action provides a potentially important theoretical tool for more closely examining contribution incentives--or their lack--in social movements. While the literature is not always unanimous in its empirical support of Olson's contentions, there exists enough general agreement on important issues to warrant serious consideration and testing of his model. And it is precisely the virtue of Olson's model that it is clearly enough articulated to permit empirical testing. This introductory chapter has only provided a cursory outline of the major theoretical elements which make up this model. The task of Chapter 2, therefore, will be to detail the specific concepts and assumptions that constitute Olson's theory so that test hypotheses can be developed and analyzed in terms of the data gathered on ZPG.

## CHAPTER 2

### ELABORATING THE THEORETICAL FRAMEWORK: MANCUR OLSON JR'S MODEL OF COLLECTIVE ACTION

Mancur Olson Jr's ideas concerning the "logic of collective action" constitute an unusually articulate and provocative theoretical model for examining member participation in voluntary organizations. The major intent of the preceding chapter was to indicate, in a general way, how this model might be usefully applied to the analysis of social movements. The intent of this chapter will be to specify the major points of Olson's model, including definitions of his key concepts, summaries of his basic assumptions, and statements of his general hypotheses.

#### AN OVERVIEW OF THE LOGIC OF COLLECTIVE ACTION MODEL

Olson begins his argument by noting that production of a collective good is problematic even when it is in the best interests of individuals to help provide the good through their contributions. The problem lies in the fact that all goods cost something to produce, and rational individuals will seek the greatest possible benefit at the least possible cost. Since, by definition, a collective good is equally shared among all members of the group (and with non-members in the case of public goods), any given member is entitled to a share of the good. On the other hand, an individual

member may be unwilling to take the responsibility of bearing a share of the costs.

In Olson's theory the size of the group is crucial in determining the general willingness of group members to share costs. For instance, in *small* groups the *share* of the collective good each member receives may be *large enough* so that individuals are willing to help bear the costs, in fact in some cases to bear the entire cost of production, if the good would not otherwise be available. However, in *large* groups, each member usually receives a smaller share of the collective good. In addition, costs will include marginal organizational costs, since organization is increasingly required for production of a good in increasingly larger groups. In short, as groups become larger, the share of the collective good will become smaller, the cost greater, and hence individual members will be less willing to make contributions.

Thus, the consequence of increasing organizational size, according to Olson, is that large groups will rarely operate only on the basis of collective goods incentives. Where large groups do exist, they are usually either "by-products" of institutional structures which can force members to share the costs, and/or the large groups offer some *private* good available only to contributors. In short, therefore, large groups will generally be less likely to produce a collective good than small groups. In addition, large groups will produce collective goods only if coercion and/or selective incentives are provided as supplementary inducements for sharing costs among members.

### SPECIFICATION OF THE MODEL

As I have previously indicated, one of the virtues of Olson's model is its explicitly defined conceptual structure. Now that a general overview of this model has been presented, it will be helpful to summarize the more exact meanings that Olson gives to his key concepts.

#### Definition of Terms

A. GROUP: "A number of individuals with a common interest" (Olson, 1971a: 8). This does not imply a group in the sociological sense of being organized in some way, only that a *potential* for organization exists on the basis of a *common* substantive interest in a collective good.

B. CONTRIBUTION: An individual resource provided for the group to assist collective action. As we have seen, contribution is always problematic to Olson.

C. GOOD: That which has value, especially as an incentive for contributions; an objective or desire held in common with all others in the group.

D. PUBLIC, COMMON, OR COLLECTIVE GOOD: "...any good such that, if any person  $X_i$  in a group  $X_1, \dots, X_i, \dots, X_n$  consumes it, it cannot feasibly be withheld from the others in that group" (Olson, 1971a: 14). In other words, a public, common, or collective good is such that each member of the designated group receives a share; no group member may be denied a share regardless of the contribution

that member may or may not have made. (Since "public goods" are the focus of the present study, I will hereafter not use the terms "common" or "collective" good.)

E. PRIVATE OR "SELECTIVE" GOODS: Goods such that individual shares are "selectively" available only to contributors; i.e., provision of the goods is selective between contributors and non-contributors. For example, most professional societies provide a specialized journal "free" to members, but charge high subscription rates for the journal to non-members.

F. UTILITY: The property of a good which makes it of value, or worth something, to an individual or group.<sup>1</sup> Utility applies to all types of goods, intangible as well as tangible, and public as well as private.

G. GROUP RESOURCES: The pool of contributions available to the group to further collective action; "surplus resources" are those available to the individual to be used for contributions to the group.

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<sup>1</sup>Olson concedes that the utility of a particular good may vary between individuals, but he does not deal with the possibility of individual variation in utility over time. In addition, theoretically, utility could also be negative, but Olson implies only positive utility in his discussion. Negative utility would not act as an incentive to contribute to the group, which is the sense Olson uses. It may be implied that negative utility might act as a positive incentive to contribute to some other group that was acting to prevent the production of the good in question.



H. COLLECTIVE ACTION: Combining member contributions and other resources to produce a public good. The antithesis to individual action.

I. PERCEPTIBILITY: The effect a contribution will have upon collective good production as interpreted by individuals. Specifically, Olson designates contributions as having a "perceptible" influence when persons believe the public good will be produced with the aid of their individual contribution and, conversely, that the good will not be produced without that contribution. Olson's notion of perceptibility is similar to the concept of "efficacy", which will be refined and developed more precisely in this study (see Chapter 4, "Operational Definitions and Hypotheses").

J. NOTICEABILITY: That condition in which the actions of any one individual are known to others in the group.

K. GROUP SIZE: An implied continuum from small to large, with differentiation between various group sizes made on the basis of the following criteria:

(1) SMALL or "PRIVILEGED" GROUP:

"...a group such that each of its members, or at least some of them, has an incentive to see that the collective good is provided, even if he has to bear the full burden of providing it himself" (Olson, 1971a: 50).

(2) INTERMEDIATE GROUP:

"...A group in which no single member gets a share of the benefit sufficient to give him an incentive to provide the good himself, but which does not have so many members that no one member will notice whether any other member

is or is not helping to provide the collective good.  
 ...no collective good may ever be obtained without some  
 group coordination or organization" (Olson, 1971a: 50).

(3) LARGE or "LATENT" GROUP:

"...is distinguished by the fact that, if one member does or does not help provide the collective good, no other one member will be significantly affected and therefore none has any reason to react....an individual in a latent group cannot make a noticeable contribution to any group effort, and since no one in the group will react if he makes no contribution, he has no incentive to contribute" (Olson, 1971a: 50).<sup>2</sup>

L. RATIONALITY: Decision-making determined on the basis of maximizing individual benefits and minimizing individual costs.

M. SELF-INTEREST: Acting "rationally" to maximize individual benefit, or welfare, without consideration for the interests of others.

Assumptions of Olson's Model

Any conceptual model ultimately relies upon, and is constrained by, a number of empirical conditions and logical (but untested) suppositions holding true. An additional attraction of Olson's formulation is that it makes explicit this assumptive base. The major assumptions of the model are as follows:

1. A public good is considered to have a "nonexcludable" property, since if one person consumes it, it cannot be withheld from others.

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<sup>2</sup>A "latent group" is the subject of this study, and clearly meets the criteria presented here.

2. "Jointness of supply" for a public good is not a necessary condition but may exist, meaning that if one person obtains the good, it can easily be supplied to others as well and in some cases (i.e., with pure public goods) additional consumption does not diminish the supply.
3. What is considered a public good by one group may not be considered a "good" by others in the society.<sup>3</sup>
4. Perfect consensus exists in the group with regard to goals and means.
5. Each individual in the group may assign the public good a different utility. This differential utility is related to the proportion of the individual's invested resources and/or desire for more of the good.
6. All individuals act in a rational and self-interested manner.
7. Individuals have personal resources available for use and/or investment.

#### Some General Propositions

Olson's model produces general propositions by relating the following variables: (1) size of the group, including both number of persons plus the value of the public good to each member, (2) rate or level of the public good obtained, (3) the fraction or share of the group good available to each member, (4) individual

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<sup>3</sup> This assumption will fit my own test of a social movement organization. The "orbital" model developed by Morrison and Hornback (Hornback, 1974) shows that most public goods associated with social movements have both proponents and opponents, and among proponents especially, the strength of the support varies from strong to weak. As we will see, this is also true of ZPG members.

advantage based on gain minus costs, and (5) individual decisions based upon personal advantage gained from contributions. Upon examining the interrelationships among these factors, Olson concludes that collective action will occur:

"...only when the benefits to the group from having the collective good exceeds the total cost by more than it exceeds the gain to one or more individuals in the group" (Olson, 1971a: 34).

It now becomes more apparent why size assumes such an important role in Olson's model. Large groups, for instance, are unlikely to engage in collective action because total costs tend to be high while shares tend to be small. In contrast, collective action is more likely to occur in small groups where individual shares are relatively large.<sup>4</sup>

However, no matter how great the utility associated with a larger share, it will not act as an incentive for contributions unless the individual also perceives his contribution as *perceptibly* affecting the possible production of the good. The perceptibility factor also interacts with group size. According to Olson, the probability that a group will act without special inducements, such as coercion and/or private goods incentives,

"...depends on whether the individual actions of any one or more members in a group are noticeable to any other individuals in the group. This is most obviously, but

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<sup>4</sup> According to Olson, in groups where members have unequal interest in the good, collective action is also probable: "...for the greater the interest in the collective good of any single member, the greater the likelihood that the member will get such a significant proportion of the total benefit from the collective good that he will gain from seeing that the good is provided" (Olson, 1971a: 34).

not exclusively, a function of the number in the group... since the larger the group, the less the likelihood that the contribution of any one will be perceptible" (Olson, 1971a: 45).

If individuals believe their contribution is not perceptible, and therefore will not make a difference in the outcome, they are not likely to contribute unless they can be coerced or are offered private goods incentives. In some cases, persons may receive satisfaction from contributing per se, whether or not their action is noticeable. In such cases, satisfaction gained from the contribution may be seen as a private or non-collective good, available only to some members of the group.

In those groups where actions are perceptible and noticed by others in the group, a social incentive may operate. This social incentive is in the form of pressure from others in the group to insure that all members bear their share of the costs. The social pressure incentive is separate from the goods incentives and may operate as the sole incentive.

On the other hand, in a large group, where a contribution makes no perceptible effect upon the outcome and the costs are relatively high, private or selective goods are required as incentives. These private goods are available only to contributors and, when added to the benefit obtained from the public good, may produce a total gain greater than the costs required of individuals. Where we find a large group that does not provide positive inducements in the form of private goods, the group is often the institutional "by-product" of a larger organization which has the power to coerce contributions. For example, the political action group of a union is supported by

a portion of union dues which must be paid by all members regardless of their interest in the political action. In essence, then, large groups engage in collective action only when they can coerce contributions and/or provide private incentives available only to contributors.

To summarize: Olson's general hypothesis is that in *small groups*, *public good incentives* will predominate. In *large groups*, *private goods incentives* are necessary to supplement whatever public good incentives may be operating. Simply stated, incentives differ according to group size. In Olson's own words:

"In any event, size is one of the determining factors in deciding whether or not it is possible that the voluntary, rational pursuit of individual interest will bring forth group-oriented behavior" (Olson, 1971a: 52).

Olson's general model does not offer specific hypotheses for empirical testing, nor does it provide specific operational definitions. Thus, specific hypotheses to be tested in this study must be derived in the process of operationalizing the model. However, two points should be made here that suggest weaknesses in Olson's theory and anticipate some of my own definitional developments in Chapter 4.

#### POINTS OF CRITICISM

First, while I agree with Olson that many "interest groups" do not, in fact, act collectively in their own best interests, I do not agree that the only reason is lack of proper incentives, especially in the case of social movements. The orbital model developed by Morrison and Hornback (1975) suggests (as does Olson) that a public good is not desired by all; rather, its utility ranges

from positive to negative. Of individuals who do desire the good, only those for whom the good's utility is great would be likely to contribute to a SMO. Individuals with lesser utility for the public good will only contribute sympathy or support for it. For example, in the environmental movement, persons may support the movement by attending a meeting or using only biodegradable products when it is convenient to do so. However, since individuals can also receive the public good without cost to themselves, they may not always actually contribute to a SMO. The reason for not contributing is not lack of *proper* incentives as Olson would argue; rather, according to the orbital model, it is lack of *strength* of incentive (the utility of the good is not great enough).<sup>5</sup> Therefore, in a given circumstance, only a subset of the "interest group" is likely to contribute to any SMO.

The second point of criticism comes from my belief that neither the strength of the incentive nor private goods incentives are the only factors involved in decisions to contribute. Olson's argument for the use of private goods incentives in large groups has some validity for SMO's (Gamson, 1975: 55-71). However, any particular SMO exists in an environment which may provide alternate organizations whose structure and/or incentive systems may better serve the interest of any particular individual.<sup>6</sup> The SMO itself may have a

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<sup>5</sup>For further discussion of the orbital model, see Hornback and Morrison (1975).

<sup>6</sup>See the earlier discussion of these factors in Chapter 1 and further elaboration of the concepts in Zald and Ash (1966) and Hirschman (1970).

history, an oligarchical power group, use of particular means, or some other feature which would negatively influence the decision to contribute.<sup>7</sup>

In addition to organizational factors, members of an "interest group" may not know that a SMO exists to serve their interest, personal resources of time or money may be insufficient to permit contributions, and/or other matters (such as family affairs or writing dissertations) may be more salient at the present time. Therefore, many factors enter into a decision to contribute to collective action, not just the profit maximizing incentive Olson presents.

Although it is not feasible to test these concepts in this study, it is important to recognize their existence and be aware that "contributors" are those who have some strong incentive to go along with their ability to contribute to the SMO.

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<sup>7</sup> ZPG advocates and supports rights to abortion and unrestricted access to birth control information as means to population control. These means are not acceptable to many in the society who are interested in controlling population growth. Also, I spoke at length with a former ZPG chapter chairman who stated that he dropped his membership after a power struggle which resulted in "shabby treatment" of the deposed leaders he favored. He still actively supports population control by giving speeches and contributing to another SMO which "provides better information on population problems." Thus, the organization itself as well as goods incentives affected his failure to continue contributing to ZPG.



## CHAPTER 3

### DATA AND METHODS

#### THE TEST POPULATION: ZERO POPULATION GROWTH, INC.

There exists a large number of voluntary organizations and social movement groups that might potentially be studied as cases for testing Olson's model of collective action. The particular group chosen for this purpose in the present study, however, seemed especially well suited, given the conceptual and methodological issues involved. The intent of this chapter, then, will be to elaborate those characteristics of Zero Population Growth, Inc., which make it a useful organization to study in Olson's theoretical context, as well as to summarize the sampling procedures and other methods used in actually gathering data on this group.

#### Organization Characteristics: Zero Population Growth, Inc.

ZPG is a voluntary organization that seeks population control through political action at local, state, and national levels. ZPG literature lists a variety of organizational goals such as assuring availability of birth control methods for all who wish to practice birth control methods for all who wish to practice birth control, repeal of all pro-natalist measures (i.e., income tax deductions for each child), complete equality between the sexes, implementation of

land-use planning, and more stringent control of migration. Strategies used to achieve these goals include political lobbying, lawsuits, and educational campaigns which are designed to encourage informed political action on the part of the general public as well as political representatives.

According to ZPG financial reports, support for the organization is about equally divided between membership dues and additional monetary contributions. Annual dues range from \$8.00 for student membership and \$15.00 for general membership to \$1,000.00 for life membership. Contributions are often listed as membership types. For instance, a contribution of \$1,000.00 or more results in a "lifetime" membership status. Those listed as members receive publications from the organization and are automatically placed on the rolls of a local chapter if one is near.

ZPG chapters are formed by application to the national headquarters in Washington, D.C., and approval is virtually automatic so long as at least ten members are in the group applying for the charter. Chapters exist so long as there is any chapter "activity" (i.e., meetings held). Each chapter receives a portion of its members' national dues to use for local activities, as well as aid and advice from the national office upon request. However, the national office has no power at the local level, and each chapter chooses its own officers, establishes its own by-laws, and regulates its own dues, policies, and activities.

Barnett (1971, 1974) did two excellent surveys of ZPG members during 1970 and 1971 which provide useful compositional data on the general organization. These surveys revealed that ZPG members were

better educated and had higher incomes and higher status occupations than the general population of that time. Almost half of the members were students (predominantly college level), less than one percent were minority group members, 43 percent belonged to some other environmental organization, and between five and ten percent were considered active in chapters. These characteristics fit the general profile of environmental movement adherents found by Hornback (1974).

Chapters vary in size from under ten to over 700 members and therefore provide a range of group sizes suitable for testing Olson's model of collective action.<sup>1</sup> About one-third of the members listed by the national organizations do not appear on local chapter rolls. Presumably, then, this segment would only have those incentives derived from the larger national group. The only specific responsibilities that non-officer members have is yearly payment of national dues. Thus, member contributions are primarily a matter of individual volition. Informal organization pressures for membership renewal undoubtedly do exist but these, of course, are not defined in the organization policies.<sup>2</sup>

#### Public and Private Goods

Population control (specifically reaching zero population growth in the United States) is the general public good, and the utility of that good provides the incentive for individuals to

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<sup>1</sup>See Table 3.1 for distribution by size.

<sup>2</sup>See Appendix A for more detail on ZPG as an organization.

TABLE 3.1  
SAMPLING DESIGN AND ZPG MEMBERSHIP BY GROUP CATEGORY  
AUGUST, 1975

ZPG MEMBERSHIP*			SAMPLE DESIGN								
Category	Total Membership (N)	Chapters in Category (N)	Chapter Leaders (N)	Members		Returned		Sampled		Leaders	
				N	% of Sample	N	% of Sample	N	% of Sample	N	% of Sample
<u>Active Chapters</u>											
Small <55	1064	32	95	50	13.55	39	12.1	48	13.0	45	13.8
Middle 55<>155	1855	21	95	50	13.55	43	13.3	48	13.0	43	13.3
Large >156	3706	11	96	50	13.55	46	14.2	48	13.0	41	12.7
Total - Active Chapters	6625	64	286	150	40.65	128	39.6	144	39.0	129	39.8
<u>Members Not in Chapters</u>											
	4022	--	---	75	20.33	66	20.4				
<u>Inactive Chapters</u>											
Small <55	492	28	28								
Middle 55<>155	206	2	0								
Large >156	179	1	3								
Total - Inactive Chapters	877	31	31								
<u>Membership Totals</u>											
	11,524	95	317								
Total sampled N = 369***    Total Returned N = 323											
% = 100                                    % = 87.5											

\* Total memberships are higher (12,269) as memberships held by other organizations or libraries were not included here--only memberships held by individuals.

\*\* None designated--some national leaders designated, but were not sampled.

\*\*\* Sample represents 3.2 percent of individual members.

contribute to ZPG. Specific means used to accomplish population control have included abortion reform, land-use planning or zoning law enforcement, and stricter control of both legal and illegal immigration. Private goods available only to members or contributors are importantly based on providing specialized information. This includes (1) information concerning proposed or pending political action on population related matters, (2) specific information and/or suggestions for individual actions such as writing letters to legislators, and (3) general and up-to-date information on population growth and/or related matters. Other important (albeit less concrete) incentives would be opportunities for interaction with others who share common interest in population control and who thus provide support for one's own views.

ZPG chapters seek local public goods such as securing passage of laws to prevent sale or development of public lands such as beaches or picnic grounds. They provide private goods such as local newsletters and special activities such as informational meetings. Thus, each chapter has local public and private goods incentives that are usually congruent in general with those offered by the national organization. Specifically, however, the public and private goods incentives offered by local chapters are often designed to meet the particular needs of a specific area and are somewhat distinct from goods offered at the national level. Thus, each chapter can, to some extent, be considered as a separate group with its own unique incentive as well as incentives which supplement the national ones.

The demographic characteristics of ZPG members and the type of public good they profess clearly place ZPG among those major social movement organizations which emerged to constitute the recent environmental movement. ZPG provides some of the important conditions needed to test Olson's theory of collective action. These conditions are briefly summarized below.

As a whole, the organization represents the mobilization of members of a large, "latent" group with a common interest in a public good: that of reaching zero population growth in the United States. This public good is much more specific than those sought by many other social movement organizations. This fact should make it easier to develop operational definitions of public goods incentives to be employed in testing Olson's model.

The specific ZPG goal of reaching zero population growth in the United States is useful for testing Olson's model in another way. Many people believe that zero population growth has been reached in the United States as a result of the birth rate reaching replacement level. This belief might lead both actual and potential ZPG members to conclude that contributions are no longer necessary to achieve the avowed public good. However, since ZPG continues to function as an organization, there is a basis for thinking that private incentives must be present for ZPG members. This notion is also implied in the fact that ZPG has experienced a growth, decline, and stability membership cycle that is typically

assumed in the organizational literature to be associated with goal displacement and the emergence of private goods incentives.<sup>3</sup>

To summarize: ZPG offers a number of characteristics that are important for testing Olson's theory. These include: (1) voluntary collective action toward production of a public good, (2) provision of private goods to contributors, (3) explicitly defined goals, (4) variation in group size by chapters, and (5) specific local goals for individual chapters.

#### SAMPLE DESIGN

The sampling procedures used in this study were designed to facilitate testing of Olson's hypothesis that group size determines the kinds of contribution incentives that will emerge in collective action groups.

Actually, Olson does not operationally define group size in his model. But the definition of size arrived at for purposes of this study (see Chapter 4 for details) dictated that a disproportionate, stratified, random sampling design be employed. In particular, it was necessary to achieve adequate subsamples from small, medium and large local chapters, as well as from members affiliated only with the national organization. Further, since organizational leaders are, in a sense, always involved in "smaller" groups than members (e.g., the leadership "elite") or may have different types of incentives related to leadership status, comparable samples of

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<sup>3</sup>Zald and Ash (1966) and Sills (1968), among others, discuss this point. The Appendix has a graphic representation of the cycle in ZPG.

both leaders and members in the various local chapter size groups were obtained.

Membership in local chapters of ZPG is assigned by zip code number of the member in question. It should be noted that members may theoretically belong to a chapter, but choose not to contribute local dues or participate in local activities.<sup>4</sup> Nevertheless, for sampling purposes, persons assigned to local chapters by zip code were considered as chapter members in this study.<sup>5</sup>

Table 3.1 gives the patterns of ZPG membership by group size and summarizes the basic sampling design. The system used in sampling members from groups was to draw every second leader from all groups, every 21st member of small groups, every 37th member of middle groups, every 74th member of large groups, and every 53rd member of those not affiliated. This procedure produced 50 members and 48 leaders from each chapter size plus 75 non-affiliated members. The sample size was designed to be large enough to permit comparisons between the groups.

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<sup>4</sup>Results of the survey indicated that only about half of the respondents with a local chapter nearby considered themselves members of that chapter, and that only about one-third of the chapter members were active. The inactive chapter members, as well as those individuals who did not consider themselves local members, are presumably members of only the large, national group.

<sup>5</sup>Information supplied by ZPG's national office provided information on leaders, chapter affiliation, and active chapters which were invaluable aids in sampling. Special appreciation is due to Larry Mires, ZPG National Chapter Chairman, for indicating leaders and active chapters on the printouts, and to Adam McLane, ZPG Business Manager, for arranging the printing of the current month's membership list by local chapter number where applicable. Both gentlemen greatly simplified the sampling process by providing this aid. I should also like to express my appreciation to all the ZPG officers and members who aided this research, without whose full cooperation this study would not have been possible.



## DATA GATHERING

### General Procedure

Data for this study were collected by means of a questionnaire mailed to the previously described sample of ZPG members. The wide geographic dispersion of the members plus limited funds dictated the use of this method even though it is generally not considered as satisfactory a method as the use of personal interviews. However, several features of the present study somewhat ameliorate this problem and are discussed below.

Moser (1969: 179) has suggested that higher response rates can be achieved on mail surveys in which the potential respondents are well educated, interested in the subject matter, and have respect for the organization backing the survey. All of these criteria appear to have been met in the present study. For instance, it is known from earlier studies (Barnett, 1974; Hornback, 1974) that ZPG members, like most environmentalists, are better educated than average citizens. The simple fact of membership in ZPG implies interest in the subject matter on the part of respondents. Finally, my own status as a researcher representing a respected organization was enhanced by the use of the Michigan State University letterhead for the covering letter. In addition, permission to do the study had been obtained from national ZPG headquarters and was so indicated in the covering letter (see Appendix B).

Two prior mail surveys of ZPG conducted by Barnett (1974: 2) had achieved 87 percent and 73 percent response rates, respectively. These are unusually high response rates for surveys of this sort and

provided a reasonable expectation for satisfactory response to mailed questionnaires in my own study.<sup>6</sup> As shown in Table 3.1, this expectation was more than adequately borne out. Completion rate of questionnaires was 88.6 percent, while usable responses represented 87.5 percent of the sample.

#### Questionnaire Construction

The questionnaire was developed according to criteria suggested by Moser (1969: 210-245) and Dillman et al. (1974: 746). Thus, questions were designed to be as simple, specific and unambiguous as possible. Opinion questions provided a range of responses which allowed respondents to express both the intensity of their opinion and also to rank issues from most important to least important. Some open-ended questions were also provided in an attempt to tap opinions and concerns not dealt with explicitly in the fixed-response questionnaire items.

Since one important aspect of the research concerned variation in local chapters, the first questionnaire items focused on respondents' knowledge of their own chapters and degree of involvement in local chapter activities. Appearing next were questions related to individual contributions and the incentives presumably responsible for contributions. Opinions on selected matters related to population control were elicited in the third set of questions, while the final portion of the questionnaire dealt with personal

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<sup>6</sup>Dillman suggested that a 75 percent response rate for mailed questionnaires was possible under some conditions (Dillman et al., 1974: 747).

and demographic questions. A complete copy of the questionnaire may be found in Appendix B.

Order of the questions was designed with several purposes in mind. For instance, it was hoped that an initial focus on local chapter involvement would provide a mental set for respondents which would encourage consideration of local issues, and thus indicate incentives at that level. On the other hand, opinion questions were primarily related to *national* issues in order to provide data on incentives related to goods at the national (or "latent" group) level. Personal and demographic questions were saved until last, since these kinds of items are typically the ones with the highest potential for discouraging complete and accurate responses. At the same time, personal and demographic questions also tend to require the least amount of consideration to answer, thus allowing the respondent to complete the questionnaire with but little additional effort.

The first three sections of the questionnaire were designed specifically for this study, although some ideas were incorporated from earlier ZPG surveys and also from suggestions made by the ZPG national office. The last section of the questionnaire utilized demographic categories designed to be comparable with Barnett's data so that some characteristics of the members could be compared over time.<sup>7</sup>

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<sup>7</sup>Demography is one of my deep interests and, although comparison of ZPG members then and now is not a purpose of this study, it will provide data for further investigation.

The overall length of the questionnaire ranged from 58 questions for ZPG members who were not involved in a local chapter to 79 questions for those members who were involved in local chapters. This constitutes a relatively small number of questions for surveys of this type (Moser, 1969), but brevity was sought in order to encourage both a higher total response rate and more complete answers. Pre-testing of the questionnaire elicited positive reactions to its length and format. Hence, only slight modifications of the questionnaire were deemed necessary for the final version.

The final form of the questionnaire was subjected to a photo-reduction process and multilithed in a four-page booklet. A cover letter was designed to emphasize the importance of a response from each member sampled, provide assurances of confidentiality of responses, summarize the purposes of the study, and stress national ZPG's approval of the study.

The letter concluded by providing the respondent with an opportunity to express non-interest in participating in the study (only two respondents actually expressed such a desire). Respondents who did wish to participate were also provided an option to receive or not receive a summary of results from the study. The cover letter was typed on an automatic machine which produced copies that had the appearance of a personally hand-typed letter. Each letter was then hand signed in ink to complete personalization.<sup>8</sup>

The cover letter, questionnaires (coded to indicate group size and respondent's name) and stamped return envelopes were mailed in

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<sup>8</sup> Copies of the cover letters may be found in Appendix B.

official Michigan State University envelopes bearing hand-typed addresses. Brightly colored commemorative stamps were used on the envelopes to attract attention and complete the process of personalization. A second letter was sent to those who did not respond within three weeks, repeating again the same personalized approach.<sup>9</sup>

The above procedures resulted in an original 84 percent response rate in one month. Monetary and time restrictions prevented any follow-up after the second mailing. The end of the sixth week after the original mailing was chosen as completion date for data collection. Only one additional response was received after this cut-off date. As noted earlier, the total response rate of 87.5 percent exceeded expectations and thus provided *post hoc* support for the choice of data gathering.

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<sup>9</sup> I would like to express deep appreciation to Dr. Denton Morrison for his aid in developing the questionnaire and special thanks to my husband, Dr. Robert Tillock, for his advice and suggestions concerning length, form and personalization of the mailing plus his aid in preparing the material for mailing.

## CHAPTER 4

### OPERATIONAL DEFINITIONS AND HYPOTHESES

#### INTRODUCTION

Since Olson bases his theory more on the use of illustrative examples and logic than empirical testing, considerable attention must be given to the development of operationally defined concepts and specific research hypotheses.

It is true that some research has already examined the effect of group size and/or incentives on the outcome of collective actions (Britt and Galle, 1974; Gamson, 1975, Chapter 5). However, no research has been designed specifically to test Olson's theory in a natural setting.<sup>1</sup> This chapter, therefore, will be primarily concerned with the task of translating Olson's ideas into empirically measurable variables. I shall attempt to adhere as closely as possible to Olson's intended conceptual meaning in this operationalization process and to explain the rationale I have used in

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<sup>1</sup>Olson specifically tests only his observation that "larger members" of the group (especially those with greater resources and/or desire for the good) tend to provide a disproportionately larger share of the costs of the good than do the "smaller members" of the group--what Olson terms "exploitation of the great by the small" (Olson and Zeckhauser, 1966: 266-279). For further examples of the theory, see Olson (1971b) and Zeckhauser (1970).

arriving at each definition.<sup>2</sup> In general, my procedure will be to present a concept taken from Olson's model, then outline some of the problems I experienced in translating the concept into empirical terms and, finally, state the specific operational definitions and hypotheses arrived at for purposes of this study, along with their rationale.

#### OPERATIONALIZING GROUP SIZE

The concept of group size is crucial to Olson's model, but he provides little direction for operationally defining size as a variable. Notions of numerical difference appear in Olson's discussion, but he is never precisely clear about what he means by a "small" number. In one instance he describes "action-taking" small groups as being somewhere around five or six members, citing small-group research for the choice (Olson, 1971a: 144-145).<sup>3</sup> In general, Olson appears to categorize a group as being small if it numbers less than fifty members. For purposes of *sampling* in the present study, therefore, chapter memberships of fifty or less were regarded

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<sup>2</sup>The specific operationalization of Olson's concepts developed from involvement in discussions relative to a paper by Dr. Denton Morrison: "A Test of Mancur Olson Jr.'s Theory of Collective Action Against an Alternative on Social Movement Organization Participants" (Research Proposal to the National Science Foundation, May, 1975).

<sup>3</sup>The size dimension has been widely used in organizational research, but is not a simple variable, and the same ambiguity about precise definitions of size differences exists in much other literature quite apart from Olson. See Lyman W. Porter, Edward W. Lawler, J. Richard Hackman, *Behavior in Organizations* (New York: McGraw-Hill Book Company, 1975: 248-249).

as approximating Olson's meaning of "small group." "Large" chapters in this study were defined as those in excess of 150 members.

Beyond the need for establishing rough sampling criteria, however, a more precise definition of small vs. large group size remains problematic. My approach to this problem was not wholly to arrive at some arbitrary numerical cutoff point. Instead, by making use of two additional ideas taken from Olson's model, I was able to arrive at four different, but possible, definitions of size. The utility of developing multiple definitions of Olson's key variable is that it should permit greater flexibility in analyzing the data as well as greater specificity in testing Olson's model. That is, it will be theoretically useful to know if Olson's contentions concerning the effect of group size on collective action hold true across all definitions of size or only for specific definitions.

The two concepts that I used to develop additional definitions of group size were Olson's notions of *perceptibility* and *noticeability*. According to Olson, both the number of *actual* contributors (*noticeability*) and the individual's *belief* about the number of *potential* contributors (*perceptibility*) combine in different ways to produce different incentives for contributions.<sup>4</sup> These combinations resulted in the following operational definitions of group size for analyzing ZPG chapters:

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<sup>4</sup>Members originally *sampled* as belonging to small or large chapters did not, in general, *consider* themselves members of the chapter and/or never attended meetings. Thus, sampling designations of size were not used.



OPERATIONAL DEFINITION 1: SMALL GROUP: Those members who consistently believe that the number of persons who support zero population growth is small at both local and national levels.

LARGE GROUP: Those members who consistently believe that the number of persons who support zero population growth is large at both local and national levels.

Rationale for this definition is based on the argument that individual contributions should be both perceptible and noticeable if the number of supporters of zero population growth is perceived to be small. Conversely, contributions should be less perceptible and less noticeable if support for zero population growth is perceived to be large.

OPERATIONAL DEFINITION 2: SMALL GROUP: Chapter members who believe the local chapter size as less than 55 members.

LARGE GROUP: Chapter members who believe the local chapter size as more than 150 members.

This definition was used to account for perceived size along the numerical lines implied by Olson. It is assumed that a person's perception of the number of *potential* contributors (i.e., those giving utility to the public good) as large or as small would, to some extent, be dependent upon the number of persons actually

observed as contributors.<sup>5</sup> Gamson (1975) has operationalized size in a similar way, but he compared different organizations of varying sizes.

OPERATIONAL DEFINITION 3: SMALL GROUP: ZPG members who belong to any local chapter.

LARGE GROUP: ZPG members who do not belong to a local chapter. (This also includes those who do not know of a local chapter near, or have dropped membership in the local chapter.)

This definition seems plausible since meetings of most local chapters are so poorly attended that all persons who actually view themselves as belonging to a local chapter should tend to perceive the potential, latent group as numerically small.<sup>6</sup> They should also tend to believe that their contributions are commensurately more perceptible

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<sup>5</sup> One question concerning perceived size of their chapter was asked of ZPG members in this study. Of the members who responded: 39% believed the chapter was small (under 50), 30% as medium (51-149), 31% as large (over 150). Only chapter leaders were relatively accurate in their judgment; members' perceptions of size were accurate in less than 1/3 of the cases.

<sup>6</sup> A question was asked of chapter members concerning estimated number of persons who usually attend meetings. Of those who responded to this question, 39% indicated 9 or fewer members attended, 27% indicated attendance at 10-30 members, 2% indicated over 30 persons in attendance, and 32% did not attend meetings themselves. Thus, chapter members in general could be considered as members of small groups since the great bulk of interaction appears to occur in groups of less than 50 members. Further justification for this assertion comes from Bales' definition of a small group as "...any number of persons engaged in interaction with one another...in which each member receives some impression or perception of each member..." (Bales, 1950: 33).

and noticeable. On the other hand, ZPG members who do not belong to a local chapter can only be aware of the large numerical size of the national group, and therefore be more likely to view their contributions as less noticeable and less perceptible.

OPERATIONAL DEFINITION 4: SMALL GROUP: ZPG members who currently hold an office at the local and/or national level.

LARGE GROUP: ZPG members who do not presently hold office at any level.

The rationale for this operationalization is simply that leaders invariably are involved in the smaller, "inner circle" of the group. Leaders also should exhibit higher public goods incentives, regardless of the number of actual or potential contributors. The leaders of large groups are, after all, according to Olson, providing the members with private goods so that their dues can be used to create public goods.<sup>7</sup>

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<sup>7</sup>Conventional sociological theory provides an alternative perspective by suggesting that the power, prestige and prerequisites of leadership are *themselves* private goods and provide strong incentives for aspiring to leadership roles, particularly as organizations undergo "institutionalization" (Michels, 1962; Zald and Ash, 1966). However, given the average SES of ZPG members and the age of the organization, Olson's notion appears to be more viable for analyzing leadership incentives in ZPG; i.e., we should expect ZPG leaders to exhibit higher public goods incentives than ZPG non-leaders.



OPERATIONALIZING THE CONCEPTS OF PUBLIC,  
PRIVATE AND SOCIAL INCENTIVES

Overview of the Incentive Concepts

Olson argues that only in *small* groups is a share of the *public* good alone a sufficient *incentive* to contribute to collective action. Olson defines the public good incentive only in terms of the size or utility (value to the individual) of the share to which the individual is entitled relative to the cost of that share. Only in small groups is the cost low enough and the share of the public good large enough for a contribution to be profitable to the individual, i.e., to provide an incentive for contribution.

Olson believes that in large groups marginal organizational costs increase the total cost of producing the public good and, generally, the share is smaller. Therefore, the public good incentive is not sufficient to induce contributions in large groups; *private* goods must be made available to contributors as an additional *incentive* feature of large groups. These private goods may be special or exclusive information, social activities, some special privilege or consideration, etc. However, in all cases, the private goods are available only to contributors.

The final incentive in Olson's model is the social pressure placed on contributors by other members of the group. Olson simply refers to this as "social incentive." However, I will use the term "social pressure incentive", since this better connotes the negative sanctions implied in Olson's concept and also allows designation of social activities as a distinct, positive, private incentive. Social pressure incentives are especially prominent in small groups where

contributions are both perceptible and noticeable and members are constantly acting to insure that all other members contribute to the costs involved in producing their share of the public good.

#### Statement of Size-Incentive Hypotheses

Given the preceding discussion and rationale, it is now possible to more succinctly state Olson's concepts in the form of explicit hypotheses. These hypotheses are as follows:

OLSON HYPOTHESIS<sub>1</sub>: Public goods incentives are higher in small than in large groups.

OLSON HYPOTHESIS<sub>2</sub>: Private goods incentives are lower in small than in large groups.

OLSON HYPOTHESIS<sub>3</sub>: Social pressure incentives are higher in small than in large groups.

#### Problems in Operationalizing the Incentive Concepts

Operationalizing these three incentive concepts is somewhat difficult in the research area of social movements. Definitional problems are perhaps greatest for the concept of public goods incentives. As noted in Chapter 1, SMO's are likely to be inclusive organizations with diffuse and/or generalized goals which are designed to satisfy the diverse interests of a large group of potential members. Diffuse or generalized goals are, of course, difficult to define in specific terms. ZPG is a case in point. It would appear from the name of the organization that "zero population growth" is literally the public good. ZPG does include in its stated goals such additional things as total equality between

women and men, stricter control of migration, etc. Obviously, each of these, or other goals discussed previously, could attract members whose primary interest might not be zero population growth itself. However, careful reading of ZPG literature on organizational activities indicates that the end product of all the various ZPG goals is to control population growth (mainly concentrating on the United States); i.e., immigration control, birth control, etc., are simply different means for achieving the same general end. Therefore, I have chosen the term "population control" to indicate the general public good incentive to contribute to ZPG.

If "population control" is to be considered a good, then another problem of definition arises concerning the concept of producing a "share" of such a good. It is virtually impossible to conceive of population control as something divisible into "shares", just as it would be very difficult to determine when "population control" has actually been achieved.<sup>8</sup> In dealing with this problem, I adopted Olson's idea that the utility of the public good helped determine its incentive value. Thus, the relative value placed by the individual on the public good was considered as representative of the utility value of that good as an incentive to contribute to ZPG; i.e., the higher the relative value of "population control", the greater the incentive value of that particular public good.

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<sup>8</sup> The "achievement of zero population growth" publicized in the general media was, in fact, only a temporary condition when fertility was at replacement level. Anyone knowledgeable in demography knows population control involves many factors in addition to the rate of natural increase.

Definitions of private goods and social pressure incentives followed Olson's concepts as closely as possible. The only real difficulty was in determining how "information" could be defined as a private good as Olson suggests, since much of the information available to ZPG members is also made public as part of the process of educating the public on population problems. However, since ZPG members receive population information much sooner than anyone else, and this information also frequently includes specific details not usually appearing in the mass media, I decided to consider information as a private good incentive. Other private good incentives were also borrowed from Olson, including social activities, sharing common interests, etc. My treatment of social pressure incentives was drawn directly from Olson's concepts; i.e., members may be pressured by others in the group to contribute.

#### Operationalizing the Incentive Concepts

All three types of incentives (public goods, private goods and social pressure incentives) were measured by obtaining responses to statements designed to elicit the value of these incentives to each individual. Table 4.1 indicates which statements were used to identify each type of incentive. Highest values were determined by the response categories of "*A crucially important reason for my membership*" or "Strongly agree."

#### REFINING THE CONCEPTS OF PUBLIC AND PRIVATE GOODS INCENTIVES

Now that Olson's "basic" hypotheses have been stated, and the conceptual elements of these hypotheses have been operationalized,



TABLE 4.1  
STATEMENTS USED TO OPERATIONALIZE INCENTIVES\*

PUBLIC GOOD INCENTIVES

- Some important aspects of my life are threatened by population growth. (6-C)
- If ZPG achieves its goals, I will personally benefit from it. (6-E)
- I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates. (9-H)
- Stopping population growth is so important that I try to support any effort aimed at that goal. (6-K)
- The benefits of ZPG membership outweigh the costs. (9-C)
- A deep concern with population problems leaves no other alternative than active support of ZPG, Inc. (9-F)
- The organization needs my contribution if it is going to achieve its goals. (6-F)
- I would drop my membership in ZPG if I thought it would reach its goals without my support. (9-Q)

PRIVATE GOODS INCENTIVES

- I personally gain much from the information I receive from ZPG. (6-B)
- Being a member of ZPG keeps me well informed on population and related problems. (9-O)
- I personally enjoy the people I associate with in the organization. (6-G)
- It's a group where I don't have to apologize for not having a big family, or not having had any children. (6-I)
- I like being a part of an important cause. (6-D)
- I enjoy my activities in the organization. (6-H)
- I have found ZPG meetings intellectually stimulating. (9-G)
- I profit from the contacts I have made in ZPG. (9-I)
- I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals. (9-K)
- I enjoy being a part of ZPG since many knowledgeable and influential people support it. (9-N)

SOCIAL PRESSURE INCENTIVES

- People who are important to me encourage my membership. (6-J)
- I would not be a member of ZPG if my friends had not urged me. (9-E)

\* The number following the statement indicates the questionnaire placement of the item (i.e., 6-A indicates question 6, part A).

the next task is to elaborate on Olson's original ideas so that they become more tractable for testing in the present study. In particular, the following section will deal with considerations necessary for applying Olson's theory to a social movement organization such as ZPG. Several of these considerations came to my attention only after the original proposal and data gathering for this study had been completed. Given these new ideas, I was led to develop a new set of hypotheses and empirically measurable concepts that hopefully will offer a more precise test of Olson's model.

#### Personal and General Public Goods Utility Incentives

Social movement goods are not only generalized, but they are also more involved with the deeply held value systems of individuals than in the economic frame of reference employed by Olson. For instance, in the environmental movement such central values as the "quality of life" and actual survival of life on Earth are of vital importance to movement members. Since ZPG members have higher education and incomes than the average person, they would be more likely to have a global perspective which would convince them of the necessity for controlling population growth to avoid potentially disastrous reduction of both the "quality of life" and the chances of preserving the life-support systems of the environment (Barnett, 1974; Meadows, 1972). This perspective strongly affects their incentives to contribute for public goods.

Olson's model implies situations where receipt of the public good is possible in a relatively short time. But in social movements, the accomplishment of the public good is not generally expected

immediately. For instance, environmental movement adherents believe that collective action is essential for both short term individual and long term social survival. In ZPG (and, indeed, in many if not most SMO's) the public good incentive involves more than personal gain, even delayed personal gain. It also involves a sense of responsibility to society and to future generations. This is not identical with the "moral code" aspect cited by Olson (1971a, ff.17, p. 61) as a private incentive; i.e., the relief of a sense of guilt or the obtaining of a "good feeling" from making a contribution to collective action seeking goods one thinks are "good" or "right." Rather, it is the more complex and subtle notion that obtaining a personal share of a public good is inextricably linked with the more general creation of that good in the society. Or, as Hirschman (1970: pp. 101-105, 116) has put it, to not create a public good is to create a public evil from which no exit (no individual alternative) exists. Some research (Kelley and Grzelak, 1974) does indicate that, in general, Olson is correct: persons do make decisions in favor of personal over group interest in the majority of cases. However, those with more information and/or understanding of the situation tend to favor collective over individual benefits.

In view of the fact that ZPG members often do not expect an immediate share of the public good, it seemed increasingly necessary to me to refine the public good incentive concept to include consideration of the "personal" benefit or utility and the "general" utility of the good for the society. Given this refinement, it no longer appears irrational (as Olson believes) for persons to

contribute to collective action without expectation of a specific, immediate return (i.e., the incentive Olson assumes to drive collective action). In other words, persons with high "general" public good incentives act collectively partly from the hope that they will receive some of the public good, but also because they have come to believe that the creation of the public good is in the best interests of *both* themselves *and* the society at large. Morrison (1975) has termed such an incentive "reform utility"; i.e., utility that perfectly *blends* personal and social interests.

#### Contingency and Contributory Efficacy Incentives

Olson implies that individuals will either do without the good or obtain it for themselves without collective action if collective action is too costly, or if a contribution has no perceptible effect on the outcome. Thus, a more or less "strict" interpretation of Olson would involve the individual's belief that creation of the public good is *contingent* on his/her contribution; i.e., the effect of a contribution is *strongly perceptible*. On the other hand, it is clear that contributions are often not viewed as strictly necessary to create the public good but are sought and given simply to "help" the cause by making the public good more probable. In the case of "contributory efficacy", then, the contribution is only *weakly* perceptible.

Given these refined notions of the public goods incentives, it is now possible to produce four different forms of public goods incentives. These are:

1. PUBLIC GOOD PERSONAL UTILITY INCENTIVE: The incentive is derived from the personal benefit expected from the public good (or the utility of the public good to the individual).

This incentive is measured by responses to the following statements:

- Some important aspects of my life are threatened by population growth.
- If ZPG achieves its goals, I will personally benefit from it.
- I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates.

2. PUBLIC GOOD GENERAL UTILITY INCENTIVE: The incentive is derived from the general belief that the public good has such high utility value for the society that the individual has the responsibility of providing it for the group as well as for him/herself personally.

This incentive is measured by responses to the following statements:

- Stopping population growth is so important that I try to support any effort aimed at that goal.
- The benefits of ZPG membership outweigh the costs.
- A deep concern with population problems leaves no other alternative than active support of ZPG, Inc.

3. PUBLIC GOOD CONTINGENCY EFFICACY INCENTIVE: This incentive is derived from the belief that individual support is needed to produce the good since each contribution will make a strongly perceptible difference in the outcome.

This incentive is measured by responses to the following statements:

- The organization needs my contribution if it is going to achieve its goals.
- I would drop my membership in ZPG if I thought it would reach its goals without my support.

4. PUBLIC GOOD CONTRIBUTORY EFFICACY INCENTIVE: This incentive is derived from the belief that a contribution will help to produce the public good, but the production of the good is not perceived as contingent on the individual's contribution.

This incentive is measured by responses to the following statement:

- My contribution is helping to influence action on population control.

Having differentiated the concept of public good into four dimensions, it is now also possible to elaborate the original public good hypothesis (see p. 51). This set of new hypotheses is based on a "strict" interpretation of Olson's theory; i.e., each of the public good dimensions should have greater incentive value in small groups compared to large groups. Thus, the new hypotheses are:

REFINED HYPOTHESIS<sub>1</sub>: Public Good Personal Utility Incentives are greater in small than in large groups.

REFINED HYPOTHESIS<sub>2</sub>: Public Good General Utility Incentives are greater in small than in large groups.

REFINED HYPOTHESIS<sub>3</sub>: Public Good Contingency Efficacy Incentives  
are greater in small than in large groups.

REFINED HYPOTHESIS<sub>4</sub>: Public Good Contributory Efficacy Incentives  
are greater in small than in large groups.

Now, a "less stringent" interpretation of Olson's theory would seem to suggest that the positive difference between small and large groups should be greater for personal utility incentives than for general utility incentives. The same should be true for contingency efficacy incentives as compared with contributory efficacy incentives. Additionally, if Olson's model is correct, the considerations involving differences in behavior between economic and social movement groups (discussed above) suggest that personal utility should be higher than general utility for the whole, undifferentiated sample. In a similar way, higher contingency efficacy than contributory efficacy incentives for the whole sample would also support Olson's model. Explicitly stated, the hypotheses are as follows:

REFINED HYPOTHESIS<sub>5</sub>: The positive difference between small and large groups is greater for personal utility than for general utility.

REFINED HYPOTHESIS<sub>6</sub>: The positive difference between small and large groups is greater for contingency than for contributory efficacy incentives.

REFINED HYPOTHESIS<sub>7</sub>: Public Good Personal Utility Incentives are higher than Public Good General Utility Incentives for the sample as a whole.

REFINED HYPOTHESIS<sub>8</sub>: Public Good Contingency Efficacy Incentives are higher than Contributory Efficacy Incentives for the sample as a whole.

### Private Goods Incentives

In order to study differences in incentive value of different types of private goods, I arrived at the following categories as useful distinctions:

1. PRIVATE GOODS INFORMATION INCENTIVES: These act as incentives for all contributors, making specialized types of information more easily available to contributors than to non-contributors. This incentive was measured by responses to the following statements:

- I personally gain much from the information I receive from ZPG.
- Being a member of ZPG keeps me well informed on population and related problems.

2. PRIVATE GOODS INTERACTION INCENTIVES: These act as incentives primarily for active members who gain from activities and/or interaction goods not available to non-contributors. This incentive is measured by responses to the following statements:

- I personally enjoy the people I associate with in the organization.
- It's a group where I don't have to apologize for not having a big family, or not having had any children.



3. PRIVATE GOODS OTHER INCENTIVES: These incentive goods are available only to contributors and depend upon individual situations and/or attitudes. In some cases, these incentives may be mixed public and private goods, but any good not purely a public good is to be considered a private good. This incentive is measured by responses to the following statements:

- I like being a part of an important cause.
- I enjoy my activities in the organization.
- I have found ZPG meetings intellectually stimulating.
- I profit from the contact I have made in ZPG.
- I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals.
- I enjoy being a part of ZPG since many knowledgeable and influential people support it.

The refined hypotheses that follow adhere to a "strict" interpretation of Olson's theory; i.e., each of the private goods should have greater incentive value in large groups, and smaller incentives in small groups. The new hypotheses are:

REFINED HYPOTHESIS<sub>9</sub>: Private Goods *Information* Incentives are lower in small than in large groups.

REFINED HYPOTHESIS<sub>10</sub>: Private Goods *Interaction* Incentives are lower in small than in large groups.

REFINED HYPOTHESIS<sub>11</sub>: Other Private Goods Incentives are lower in small than in large groups.

### CONTRIBUTIONS AND GAIN

In this study, a "contribution" to ZPG is simply defined as payment of membership dues. Thus, in much of the analysis that follows, the contributions of ZPG members are assumed to be constant while the aim is to determine if *incentives* for contributions vary between large and small groups according to the Olson model. However, it should be noted that contributions in SMO's are made in a variety of ways that supplement the primarily monetary form Olson implicitly assumes in his economic model.

In a SMO, for instance, personal contributions to activities and roles are both essential for organizational survival, in addition to money contributions. Activities include writing letters, giving talks, attending meetings, and other such actions which will aid the "cause." Roles are of many types, but leadership roles are especially important in "task-oriented" groups such as SMO's. Consequently, leadership was the only role I chose to operationalize in the present study. "Leader" could mean occupying an office or directing activities in the group, or both. For present purposes it was operationalized to mean "holding an office."

Total contribution to ZPG was then based on a "contribution index" designed to measure individual inputs of money, activity, and/or role involvement. This index is summarized in Table 4.2.

It should be noted here that the contribution index will be used only to attempt to operationalize and test Olson's concepts of larger contributions in small groups and to roughly approximate his concept of "gain" as operationalized below. Actual contributions are difficult to determine as they may depend upon personal resources

TABLE 4.2  
CONTRIBUTIONS INDEX

INDICATOR	INDEX VALUE***	SCALE	STANDARD- IZED RANGE
Membership Type		1-4*	3.1-12.5
Dues - Amount paid per year			
\$ 8.00 . . . . .	1		
15.00 . . . . .	2		
22.50 . . . . .	3		
30.00 or more . . . . .	4		
Other Monetary Contributions in Addition to Dues		0-3	0 - 9.4
At local level . . . . .	1		
At national level** . . . . .	2		
Activities		0-9	0 -28.1
Write letters in behalf of ZPG			
At local level . . . . .	1		
At national level. . . . .	2		
Give speeches, serve on panel discussions, attend hearings, etc.			
At local level . . . . .	1		
At national level. . . . .	2		
Work for candidates, referenda, favorable to ZPG policies (political work)			
At local level . . . . .	1		
At national level. . . . .	2		
Roles - present leader status		0-16	0 -50
Local office held. . . . .	8		
National office held . . . . .	8		
	TOTALS	1-32	3.1-100

Possible range of contributions 1-32 (standardized 3.1-100)

\* Cannot be less than one, since all respondents were dues-paying members.

\*\* Contributions at the national level, with the exception of office holders, were considered as requiring more effort, thus a larger contribution than that at the local level. Some cases included both local and national contributions.

\*\*\* Index value was determined by responses on questionnaires with the exception of membership type, which was coded from membership lists used for sampling. For computation and comparison purposes, the index was standardized on a 0-100 scale by computing the percent; i.e., "1" is 3.1% of 32.

of time and money rather than the desire to contribute. Therefore, contributions will be considered as equal for all tests of hypotheses presented to this point. In addition, the contribution and "gain" indices cannot be used for "hold office/not hold office" and "chapter member/not chapter member" categories, since by definition the small group in each case makes a higher contribution. The contribution index will be used to test the following hypothesis:

REFINED HYPOTHESIS<sub>12</sub>: Contributions will be greater in small groups than in large groups.<sup>9</sup>

#### Gain

The contribution index was also used in conjunction with the Olson Public Good Index<sup>10</sup> to derive a measure of "gain" for each respondent in an attempt to roughly operationalize Olson's notion of "group gain"; i.e., the relationship between total costs and benefits for all the members of the group (Olson, 1971a: 33-34). To determine the "gain", each respondent's individual gain was computed as a ratio of the Public Good Index to the contribution index; i.e., "gain" is what each person gains or benefits in the public good in relation to the "cost" of that individual's contribution.

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<sup>9</sup>This hypothesis will only be tested for "perceived" group size operationalizations since, by definition, the index would have higher values for leaders as compared with individual members, and for chapter members as compared with those not active in chapters.

<sup>10</sup>The Olson Public Goods Index is the sum of the utility of all the public good indicators. The resultant sum was standardized to 100 to permit comparison with other indices.

According to Olson, the mean of the individual "gain" is greater in small than in large groups. Thus:

REFINED HYPOTHESIS<sub>13</sub>: Individual gain is higher in small than in large groups.

#### Public to Private Goods Ratios

Olson's notion of "gain" is based on public goods only and implies that public goods predominate in small groups, while private goods are relatively more important in large groups. Assuming that each individual's incentives are mixed, a more precise interpretation of Olson would require examination of the relationship of public to private goods for each individual. In order to operationalize this concept, all public and private goods variable sources were standardized to 100, and then the ratios of public to private goods were determined for each individual. The mean of these ratios for each group then becomes the ratio indicator for that group. Given Olson's notion that private goods have a more prominent part than public goods in larger groups, the hypothesis becomes:

REFINED HYPOTHESIS<sub>14</sub>: The ratio of public to private goods is higher in small than in large groups.

#### Procedures

Analysis of the data generated from the preceding operationalization process was carried out in the following way. First, all the independent variables (group size operationalizations) are examined in relation to the individual items used to measure the dependent variables (public and private goods incentives and contributions)

for the relevant hypotheses. Then, independent variables are examined in relation to the indexed dependent variables. Following this the "gain" variable is examined. Finally, the independent variables are examined in relation to the ratios. Results of the analysis outlined above will be found in the next chapter.

## CHAPTER 5

### FINDINGS

In this chapter I first will present the "raw", empirical findings of the study; i.e., the numerical results obtained from testing the hypotheses generated in the preceding chapter. I will also briefly summarize the extent to which each hypothesis appears to be supported by the empirical tests employed. Finally, I will attempt to discuss and interpret more fully the separate data analysis results as an overall set of findings in relationship to Olson's theory. To achieve greater clarity of presentation, only summaries of the various test results will be given here; detailed findings are available in Appendix C.

#### SURVEYED CHARACTERISTICS OF ZPG: AN OVERVIEW OF THE ENTIRE SAMPLE<sup>1</sup>

The main empirical intent of this chapter is to compare various public and private good indicators for the previously arrived at operationalizations of large and small groups. However, it should be initially useful to characterize some basic findings on the sample as a whole, since ZPG is, overall, a large group, and the findings for the whole sample have a meaningful, if general, bearing

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<sup>1</sup>Specific results for all questions are found in Appendix B.

on Olson's theory. Once the sample as a whole has been characterized, I will then present the findings for the small and large group breakdowns.

As anticipated, ZPG respondents were found to have substantially higher incomes, higher education, and higher status occupations than average for the population of the United States.<sup>2</sup> In short, ZPG members appear to conform to the general demographic pattern of environmental movement members (Hornback, 1974).

Two-thirds of the respondents have been ZPG members since 1971. Only half of the 67 percent who reported they were near a local chapter also identified themselves as members of that chapter. Two-thirds of all ZPG respondents never attend any meetings. Contributions are reported to be primarily in the form of dues, other monetary contributions and "letter writing." Less than one-fourth of the respondents have ever held an office. And, as is true in most voluntary organizations, the majority apparently is not deeply involved in organizational activities.

It is clear that contributions of ZPG members are importantly based on public goods incentives. When asked to "indicate the one most important and the one least important reason for membership" (Table 5.1), over 87 percent of the respondents chose reasons defined as public goods as the most important basis for their

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<sup>2</sup>In 1974, United States White Population median income was \$12,595, ZPG members' was about \$20,000; 26% of those over age 25 in the general white population had "some college", but 46% of ZPG members have some graduate degree; U.S. White Population has 51% white collar, 49% blue collar occupation, ZPG members report 67% professional or managerial with only 5% clerical, sales, or blue collar.



TABLE 5.1  
REASONS FOR BELONGING TO ZPG

RANK	TYPE OF GOOD	SPECIFIC VARIABLE	PERCENT OF TOTAL SAMPLE
<u>Rank Order - Most Important Reasons for Belonging to ZPG*</u>			
1	Public	Stopping population growth is so important that I try to support any effort aimed at that goal.	37.7
2	Public	My contribution is helping to influence action on population control.	31.1
3	Public	Some important aspects of my life are threatened by population growth.	14.2
4	Other reasons - not coded	Other reason, please state _____	9.1
5	Public	The organization needs my contribution if it is going to achieve its goals.	2.5
6	Public	If ZPG achieves its goals, I will personally benefit from it.	1.6
6	Private	I personally gain much from the information I receive from ZPG.	1.6
7	Private	I like being a part of an important cause.	0.9
8	Private	I enjoy my activities in the organization.	0.6
8	Private	It's a group where I don't have to apologize for not having a big family, or not having had any children.	0.6
<u>Rank Order - Least Important Reason for Belonging to ZPG*</u>			
1	Social Pressure	People who are important to me encourage my membership.	34.7
2	Private	It's a group where I don't have to apologize for not having a big family, or not having had any children.	31.5
3	Private	I enjoy my activities in the organization.	9.9
4	Private	I personally enjoy the people I associate with in the organization.	8.0
4	Private	I like being a part of an important cause.	8.0
5	Public	If ZPG achieves its goals, I will personally benefit from it.	3.5
6	Public	The organization needs my contribution if it is going to achieve its goals.	1.9
7	Public	Stopping population growth is so important that I try to support any effort aimed at that goal.	1.3
8	Public	Some important aspects of my life are threatened by population growth.	1.0
9	Private	I personally gain much from the information I receive from ZPG.	0.3

\* Percentages based on the total sample, N = 323.

membership, while less than eight percent chose a public good as the least important reason for membership. Other public and private goods indicators, indices, and ratios clearly indicate that, in general, public good incentives predominate, private good incentives are next in importance, and social pressure incentives are a poor third (Table 5.2).

However, the distinct preference for public goods incentives becomes somewhat blurred when answers are considered to the open-ended query, "What do you feel that you personally gain, if anything, from membership in ZPG?" Responses to this question which did not clearly fit the structured categories provided in the previous close-ended question were coded as either "other public" or "other private." In those instances where more than one category applied, both were coded. An answer of "nothing" was coded as such. Responses to this question seem to indicate that *certain* private goods incentives actually rank quite comparably to public goods incentives (Table 5.3). For instance, the personal information incentive now ranks as the highest single incentive of all, while enjoyment of activities in the organization and effect associated with being part of an important cause now rank higher than several public good incentive items (see Table 5.1). It should be noted, however, that while "information" has been treated as a private good in this study, it may also be considered as an aspect of the public good that ZPG is attempting to accomplish. In reality, then, information is both a private and a public good.

The open-ended responses suggest additional ways in which individual incentives for membership may actually have a decidedly

TABLE 3.2  
INCENTIVE VALUES FOR THE TOTAL SAMPLE\*

	MEAN SCORE	INDEX
<u>Public Good Total</u>		73.03
<u>Public Good Personal Utility Indicators</u>		65.30
C. Some important aspects of my life are threatened by population growth.	3.00	
E. If ZPG achieves its goals, I will personally benefit from it.	2.45	
H. I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates.	1.37	
<u>Public Good General Utility Indicators</u>		83.27
K. Stopping population growth is so important that I try to support any effort aimed at that goal.	3.45	
C. The benefits of ZPG membership outweigh the costs.	3.31	
F. A deep concern with population problems leaves no other alternative than active support of ZPG, Inc.	3.15	
<u>Overall Public Good Utility</u>		74.50
<u>Public Good Contingency Efficacy Indicators</u>		59.65
F. The organization needs my contribution if it is going to achieve its goals.	2.78	
Q. I would drop my membership in ZPG if I thought it would reach its goals without my support.	1.16	
<u>Public Good Contributory Efficacy Indicators</u>		90.03
A. My contribution is helping to influence action on population control.	3.50	
<u>Overall Public Good Efficacy</u>		69.95
<u>Private Good Total</u>		53.75
<u>Private Good Information Indicators</u>		73.31
O. Being a member of ZPG keeps me well informed on population and related problems.	3.19	
B. I personally gain much from the information I receive from ZPG.	2.13	
<u>Private Good Interaction Indicators</u>		34.71
G. I have found ZPG meetings intellectually stimulating.	2.78	
K. I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals.	1.82	
D. I like being a part of an important cause.	1.70	
I. I profit from the contact I have made in ZPG.	1.60	
N. I enjoy my activities in the organization.	1.00	
M. I enjoy being a part of ZPG since many knowledgeable and influential people support it.	1.46	
<u>Social Pressure Indicators</u>		28.46
E. I would not be a member of ZPG if my friends had not urged me.	0.42	
J. People who are important to me encourage my membership.	0.41	
<u>Contributions Index</u>		
<u>Gain Index</u>		24.80
<u>Total Public to Total Private Goods Ratio</u>		5.89
		1.44

\* N = 323.

TABLE 5.3  
RANKING OF OPEN-ENDED RESPONSE CATEGORIES TO THE QUESTION:  
"WHAT DO YOU PERSONALLY GAIN FROM MEMBERSHIP IN ZPG?"

RANK	TYPE OF GOOD OR INCENTIVE	SPECIFIC VARIABLE	PERCENT TOTAL SAMPLE
1	Private	I personally gain much from the information I receive from ZPG.	42.4
2	Public	My contribution is helping to influence action on population control.	33.1
3	Private	I enjoy my activities in the organization.	19.8
4	Public	Stopping population growth is so important that I try to support any effort aimed at that goal.	19.2
5	Private	I like being a part of an important cause.	15.5
6	Private	I personally enjoy the people I associate with in the organization.	8.7
7	Public	Some important aspects of my life are threatened by population growth.	4.0
7	Other Private - Does not fit other private categories		4.3
8	Other Public - Does not fit other public categories		2.5
9	Public	The organization needs my contribution if it is going to achieve its goals.	1.9
10	Public	If ZPG achieves its goals, I will personally benefit from it.	0.9

"mixed" quality that interrelates private and public dimensions. When the open-ended responses are coded according to whether they contain indications of private good only, public good only, mixed incentives, or no incentives, the "mixed" category predominates for the sample as a whole, followed by private and then public incentives. The higher percentage of private to public responses does, of course, support the Olson model for the sample as a whole, but the fact that the highest percentage of respondents give *mixed* incentives suggests that most self-expressed incentives do not fall neatly into the Olson categories. A further qualitative notion of the subtle blending of incentives involved can readily be seen in the sample of actual responses to the item given in Appendix D. Of more specific relevance to the versions of Olson's Hypotheses 1 and 2 (to be tested below) is the fact that there is no consistent or strong tendency to predominate in any of my various operational definitions of small group nor, conversely, do private incentives show strong or consistent predominance in any of the large groups. If anything, the differences, when they show any noteworthy magnitude at all, provide support for a reversal of Olson's hypothesis (Table 5.4).

PUBLIC, PRIVATE, AND SOCIAL PRESSURE INCENTIVES:  
TESTING THE ORIGINAL OLSON HYPOTHESES

The initial tests concern Olson's hypotheses that public goods and social pressure incentives are larger in small than in large groups, while the reverse should be true for private goods incentives. To test the hypotheses, differences between mean scores on closed-ended questions were used in making comparisons between the various small-large group breakdowns, while differences between percentages

TABLE 5.4  
SUMMARY OF RESPONSES TO OPEN-ENDED QUESTION "WHAT GAIN?" BY GROUP SIZE OPERATIONALIZATIONS

CATEGORY	TOTAL SAMPLE %	CONSISTENTLY BELIEVE SUPPORT FOR ZPG		BELONG LOCAL CHAPTER SMALL		NOT BELONG LOCAL CHAPTER LARGE		BELIEVE CHAPTER SIZE IS	
		SMALL %	LARGE %	SMALL %		SMALL %		<55 %	>150 LARGE %
Public Good Only	17.3	16.7	19.6	17.7		17.0		11.3	23.8
Mixed Public and Private	35.9	36.3	33.3	37.8		34.0		45.3	31.0
Private Good Only	28.5	31.4	25.5	31.1		25.8		32.1	33.3
Nothing Gained	6.5	6.9	7.8	3.0		10.1		3.8	2.4
No Response	11.8	8.8	13.7	10.4		13.2		7.5	9.5

were used for the open-ended questions. Any differences between the means in the hypothesized direction were considered to support the hypothesis in question.<sup>3</sup> The results are shown in Table 5.5 in summary form (detailed tables in Appendix C). The overall results are mixed with somewhat less than half (59 of 117 tests, or 41.9 percent) of the "tests" supporting Olson's hypotheses. Specifically:

OLSON HYPOTHESIS<sub>1</sub>: Public goods incentives are higher in small than in large groups.

25 of 54 tests, or 46.3%, support the hypothesis.

OLSON HYPOTHESIS<sub>2</sub>: Private goods incentives are lower in small than in large groups.

18 of 55 tests, or 32.7%, support the hypothesis.

OLSON HYPOTHESIS<sub>3</sub>: Social pressure incentives are higher in small than in large groups.

6 of 8 tests, or 75%, support the hypothesis.

#### TESTING THE "REFINED" HYPOTHESES ON PUBLIC, PRIVATE AND SOCIAL PRESSURE INCENTIVES

The second set of tests was made on the refined hypotheses which covered Public Goods Utility and Efficacy Incentives, Private Goods Information Incentives, Interaction Incentives, and the residual category of incentives coded as Other Private Goods. These tests also utilized mean scores obtained on the standardized indices and,

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<sup>3</sup>This form of "test" was used to offer the greatest possible opportunity for support of the hypotheses. Therefore, in this study, each comparison between the means of small and large groups was considered a test.

TABLE 5.5  
SUMMARY OF TESTS OF OLSON HYPOTHESES, INCENTIVE TYPES BY GROUP SIZE OPERATIONALIZATIONS\*

Item	Consistent Belief Support for ZPG Small/Large (102) (51)**	Believe Chapter Size 50/150 Small/Large (53) (42)	Member Chapter/ Local Not Member Local (164) (159)	Hold Office/ Not Hold Office (74) (249)	Ratio Support Total Number Tests (%)
<b>Public Goods Incentives (closed responses)</b>					
Some important aspects of my life are threatened by population growth.	+	+	+		3/4 (75)
If ZPG achieves its goals, I will personally benefit from it.			+		1/4 (25)
I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates.			+		1/4 (25)
Stopping population growth is so important that I try to support any effort aimed at that goal.	+	+			2/4 (50)
The benefits of ZPG membership outweigh the costs.			+	+	2/4 (50)
A deep concern with population problems leaves no other alternative than active support of ZPG, Inc.	+		+	+	3/4 (75)
The organization needs my contribution if it is going to achieve its goals.	+	+			2/4 (50)
I would drop my membership in ZPG if I thought it would reach its goals without my support.		+			1/4 (25)
My contribution is helping to influence action on population control.			+		1/4 (25)
<b>Public Goods Incentives (open-ended responses)</b>					
Some important aspects of my life are threatened by population growth.			+		1/3 (33.3)
If ZPG achieves its goals, I will personally benefit from it.		+			1/3 (33.3)
Stopping population growth is so important that I try to support any effort aimed at that goal.	+	+	+		3/3 (100)
The organization needs my contribution if it is going to achieve its goals.		+	+		2/3 (66.6)
My contribution is helping to influence action on population control.	+		+		2/3 (66.6)
<b>Other Public Goods</b>					
<b>Public Goods Total Support</b>	6	7	10	2	25
<b>Total Number of Tests</b>	15	15	15	9	54
<b>Percent Support</b>	40%	46.6%	66.6%	22.2%	46.3%
<b>Private Goods Incentives (closed responses)</b>					
Being a member of ZPG keeps me well informed on population and related problems.	+	+			2/4 (50)
I personally gain much from the information I receive from ZPG.	+				1/4 (25)
I personally enjoy the people I associate with in the organization.	+	+			2/4 (50)
It's a group where I don't have to apologize for not having a big family, or not having had any children.		+			1/4 (25)
I have found ZPG meetings intellectually stimulating.	+	+			2/4 (50)
I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals.					0/4 (0.0)
I like being a part of an important cause.					0/4 (0.0)
I profit from the contacts I have made in ZPG.	+	+			2/4 (50)
I enjoy my activities in the organization.	+	+			2/4 (50)
I enjoy being a part of ZPG since many knowledgeable and influential people support it.	+				1/4 (25)



TABLE 5.5 (continued)

Item	Consistent Belief Support for ZPG Small/Large (102) (51)**	Believe Chapter Size <50/>150 (53) (42)	Member Local Chapter/ Not Member Local (164) (159)	Hold Office/ Not Hold Office (74) (249)	Ratio Support Total Number Tests (%)
<u>Private Goods Incentives (open-ended responses)</u>					
I personally gain much from the information I receive from ZPG.	+				1/3 (33.3)
I personally enjoy the people I associate with in the organization.		+			1/3 (33.3)
I like being a part of an important cause.		+	+		2/3 (66.6)
I enjoy my activities in the organization.					0/3 (0.0)
<u>Other Private Goods</u>					
			+		1/3 (33.3)
<u>Private Goods Total Support</u>	8	8	2	0	18
<u>Total Number of Tests</u>	15	15	15	10	55
<u>Percent Support</u>	53.3%	53.3%	13.3%	0%	32.7%
<u>Social Pressure Incentives (closed responses)</u>					
I would not be a member of ZPG if my friends had not urged me.	+	+			2/4 (50)
People who are important to me encourage my membership.	+	+	+	+	4/4 (100)
<u>Social Pressure Total Support</u>	2	2	1	1	6
<u>Total Number of Tests</u>	2	2	2	2	8
<u>Percent Support</u>	100%	100%	50%	50%	75%
<u>SUMMARY</u>					
<u>All Incentives Total Support</u>	16	17	13	3	49
<u>Total Number of Tests</u>	32	32	32	21	117
<u>Percent Support</u>	50%	53.1%	40.6%	14.3%	41.9%

\* The N for all group size operationalizations remains the same for all tests.

\*\* A "+" signifies support of the test.

as before, any differences between the means of small and large groups in the direction of the hypotheses were considered as confirmations. The refined measures, which involve indices of the individual variables, produce another set of mixed results (see summary Table 5.6). For public goods incentives, the results are:

REFINED HYPOTHESIS<sub>1</sub>: Public good personal utility incentives are greater in small than in large groups.  
1 of 4 tests (25%) supported the hypothesis.

REFINED HYPOTHESIS<sub>2</sub>: Public good general utility incentives are greater in small than in large groups.  
3 of 4 tests (75%) supported the hypothesis.

REFINED HYPOTHESIS<sub>3</sub>: Public good contingency efficacy incentives are greater in small than in large groups.  
1 of 4 tests (25%) supported the hypothesis.

REFINED HYPOTHESIS<sub>4</sub>: Public good contributory efficacy incentives are greater in small than in large groups.  
1 of 4 tests (25%) supported the hypothesis.

The Public Good total index (all public goods combined) supported the Olson Hypothesis<sub>1</sub> in one of four tests (25%). Of all the tests made on the indices for public goods, 10 of 28 tests (35.7%) supported the hypotheses.

TABLE 5.6  
INDEX VALUE OF INCENTIVES BY GROUP SIZE

Incentives	Small/ Large	Chapter Size	Member/ Not Member	Values		Number Support	Percent Support
				Leader/ Not Leader	Not Leader		
Public Good Personal Utility			+			1	25%
Public Good General Utility	+		+	+		3	75%
Overall Public Good Utility			+	+		2	50%
Public Good Contingency Efficacy		+				1	25%
Public Good Contributory Efficacy		+	+			1	25%
Overall Public Good Efficacy						1	25%
Public Good Total (Olson Public Good)			+			1	25%
Private Good Information	+	+				2	50%
Private Good Interaction	+	+				2	50%
Private Good Other	+	+				2	50%
Private Good Total (Olson Private Good)	+	+				2	50%
Social Pressure	+	+	+				
Total Number of Confirmations	6	7	6		2	21	
Total Number of Tests	12	12	12		12	48	
Percent Confirmed	50%	58.3%	50%		16.6%	<u>43.8%</u>	

For Private Goods Incentives the results are:

REFINED HYPOTHESIS<sub>9</sub>: Private goods information incentives are lower  
in small than in large groups.

2 of 4 tests (50%) supported the hypothesis.

REFINED HYPOTHESIS<sub>10</sub>: Private goods interaction incentives are  
lower in small than in large groups.

2 of 4 tests (50%) supported the hypothesis.

REFINED HYPOTHESIS<sub>11</sub>: Other private goods incentives are lower in  
small than in large groups.

2 of 4 tests (50%) supported the hypothesis.

The Private Goods total index (combining all private goods) supported  
the Olson Hypothesis<sub>2</sub> in 2 of 4 tests (50%). In all of the tests in  
Private Goods indices, 8 of 16 (50%) supported the hypotheses.

Social pressure incentive indices were tested on Olson Hypothesis<sub>3</sub>  
and 3 of 4 tests (75%) supported this hypothesis.

Finally, when all of the tests of Public, Private, and Social  
Pressure incentives using the indices were taken into account, 21  
of 48 tests, or 43.8 percent, provided support for the hypotheses.

#### RELATIONSHIPS BETWEEN GROUP SIZE AND PUBLIC GOODS INCENTIVES

The next set of findings to be reported are concerned with the  
different types of public goods incentives as a test of Olson's  
notion that personal utility and contributory efficacy should be  
greater than general utility and contingency efficacy, respectively.

The results of the tests are as follows:

REFINED HYPOTHESIS<sub>5</sub>: The positive difference between small and large groups is greater for personal utility incentives than for general utility incentives.  
3 of 4 tests (75%) supported the hypothesis.

REFINED HYPOTHESIS<sub>6</sub>: The positive difference between small and large groups is greater for contingency than for contributory efficacy incentives.  
3 of 4 tests (75%) supported the hypothesis.

REFINED HYPOTHESIS<sub>7</sub>: Public good personal utility incentives are higher than public good general utility incentives.  
No support.

REFINED HYPOTHESIS<sub>8</sub>: Public good contingency efficacy incentives are higher than contributory efficacy incentives.  
No support.

Table 5.7 provides a data summary for test results on the relationships between group size and different types of Public Goods Incentives.

### Contributions

According to Olson, contributions are greater in small than in large groups. This hypothesis was tested using only two of the four independent variables. The "member/not member" and "hold office/not

TABLE 5.7  
RELATIONSHIPS BETWEEN INDICES OF PUBLIC GOODS INCENTIVES BY GROUP SIZE

Positive Difference Between Small and Large Groups Mean Values	Personal Utility Incentives	General Utility Incentives	Support	Contingency Efficacy Incentives	Contributory Efficacy Incentives	Support
Consistently believe support for ZPG small/large	1.90	0.81	+	1.57	3.54	
Believe chapter size is under 55/over 150	2.35	0.39	+	2.73	4.60	
Member local chapter/not member local chapter	3.21	2.42	+	3.70	0.95	+
Presently Hold Office/ Not Hold Office	0.45	2.20		3.42	2.16	+
Total Number of Supporting Tests Total Number of Tests		3 of 4			2 of 4	
Percent confirm		75%			50%	
Value of Incentives (Index Values)	Personal Utility	General Utility	Support	Contingency Efficacy	Contributory Efficacy	Support
Consistently believe support for ZPG is	66.47 68.17	82.82 80.01		58.63 60.20	89.40 92.74	
Believe chapter size is						
Small	66.54	82.39		58.68	88.08	
Large	68.89	82.78		55.95	92.68	
Member/Not Member	66.85 63.64	84.45 82.03		57.85 61.55	90.49 89.54	
Presently hold office/not hold office	64.96 65.41	84.96 82.78		57.03 60.45	88.38 90.54	
		No support	0		No support	0

hold office" categories were not used since leadership and local membership are both coded as contributions. Thus, respondents who are chapter members or hold office would, by definition, have higher contributions. The means of the Contribution Indices for members of tested groups are as follows:

Consistent belief support for ZPG is small	24.6	not supported
Consistent belief support for ZPG is large	31.9	
Believe chapter size is under 55 (small)	37.7	not supported
Believe chapter size is over 150 (large)	40.2	

Comparison of the above results indicates that:

REFINED HYPOTHESIS<sub>12</sub>: Contributions will be greater in small than in large groups.

Not supported.

### Gain

For test purposes, gain was determined by the ratio of the indexed values of the public goods to the contributions. The individual gain thus computed serves as an indicator of each person's benefit in relation to the "costs" of his contribution. The tests of gain (see Table 5.8) indicated that:

REFINED HYPOTHESIS<sub>13</sub>: Individual gain is higher in small than in larger groups.

2 of 4 tests (50%) supported the hypothesis.

### Ratio of Public to Private Goods Incentive Values

A final set of tests were carried out to determine whether the ratio of public to private goods is higher in small than in large

TABLE 5.8  
INDIVIDUAL GAIN BY GROUP SIZE

		Individual Gain
Consistently believe support for ZPG	Small	5.71
	Large	4.85
	Difference	.86
Believe chapter size is under 55 over 150	Small	3.51
	Large	2.91
	Difference	.60
Member local chapter/Not member local chapter	Small	3.75
	Large	8.09
	Difference	4.34
Presently hold office/Not hold office	Small	1.34
	Large	7.24
	Difference	5.87
<u>Total number of supportive tests</u>		$\frac{2}{4}$
Total number of tests		
Percent confirmed		50%

groups, as Olson suggests. The standardized indices for Total Public Goods and for Total Private Goods were used as ratio components.

The results are presented below:

Believe support for ZPG is small	1.46	supported
Believe support for ZPG is large	1.41	
Believe chapter size 55 (small)	1.30	supported
Believe chapter size 150 (large)	1.26	
Belong local chapter (small)	1.34	not supported
Not belong local chapter (large)	1.56	



Hold office (small)	1.23	not supported
Not hold office (large)	1.51	

REFINED HYPOTHESIS<sub>14</sub>: The ratio of public to private goods is higher in small than in large groups.  
50% supported.

#### Overall Summary of Findings

Table 5.9 summarizes results for all of the specific tests of hypotheses. These results clearly show that the general picture is not one of consistent or strong support for Olson's model. Only three of the 17 hypotheses are supported by more than half of the tests. One of these three "supported" hypotheses (Olson H-3) deals with *social pressure*, perhaps the least theoretically problematic and crucial component of Olson's theory, since social pressure has been shown to affect behavior in small group research. Another of the clearly supported hypotheses (Refined H-2) deals with the predominance of *general utility*, a notion that is intended to represent an alternative to or at least a refinement of Olson's strong emphasis on personal utility. Refined hypothesis 5, which attempts to relate the personal and general utility ideas in a way compatible with Olson's thinking, received rather clear support also. However, even these three hypotheses were only supported in roughly 75 percent of the tests, and therefore should not be considered strong enough to carry the burden for Olson's theory. Since three of the remaining hypotheses were not supported at all, and support for all of the hypotheses totaled only 40 percent, it is clear that Olson's theory is not supported in this study.

TABLE 5.9  
SUMMARY OF SUPPORT FOR HYPOTHESES

HYPOTHESES	TESTS SUPPORT/TESTS	TOTAL TESTS	(%)
OLSON HYPOTHESIS 1: Public goods incentives are higher in small than in large groups.	40 of 93	(43)	
OLSON HYPOTHESIS 2: Private goods incentives are lower in small than in large groups.	27 of 74	(36)	
OLSON HYPOTHESIS 3: Social Pressure incentives are higher in small than in large groups.	9 of 12	(75)	
REFINED HYPOTHESIS 1: Public good personal utility incentives are greater in small than in large groups.	1 of 4	(25)	
REFINED HYPOTHESIS 2: Public good general utility incentives are greater in small than in large groups.	3 of 4	(75)	
REFINED HYPOTHESIS 3: Public good contingency efficacy incentives are greater in small than in large groups.	1 of 4	(25)	
REFINED HYPOTHESIS 4: Public good contributory efficacy incentives are greater in small than in large groups.	1 of 4	(25)	
REFINED HYPOTHESIS 5: The positive difference between small and large groups is greater for personal utility than for general utility.	3 of 4	(75)	
REFINED HYPOTHESIS 6: The positive difference between small and large groups is greater for contingency efficacy than for contributory efficacy.	2 of 4	(50)	
REFINED HYPOTHESIS 7: Public good personal utility incentives are higher than public good general utility incentives.	0 of 8	(0)	
REFINED HYPOTHESIS 8: Public good contingency efficacy incentives are higher than contributory efficacy incentives.	0 of 8	(0)	
REFINED HYPOTHESIS 9: Private goods information incentives are smaller in small than in large groups.	2 of 4	(50)	
REFINED HYPOTHESIS 10: Private goods interaction incentives are smaller in small than in large groups.	2 of 4	(50)	
REFINED HYPOTHESIS 11: Other private goods incentives are smaller in small than in large groups.	2 of 4	(50)	
REFINED HYPOTHESIS 12: Contributions will be greater in small than in large groups.	0 of 2	(0)	
REFINED HYPOTHESIS 13: Individual gain is higher in small than in large groups.	2 of 4	(50)	
REFINED HYPOTHESIS 14: The ratio of public to private goods is higher in small than in large groups.	2 of 4	(50)	
TOTAL OF ALL TESTS OF HYPOTHESES	97 of 241	(40.2)	

## ELABORATION AND DISCUSSION OF TEST RESULTS

The findings summarized above indicate no obvious patterns of clear or consistent support for the kinds of incentives to contribute to collective action that are posited by Olson's theory. However, the objective now of a more complete discussion of these findings will be to uncover general patterns and regularities in the data and then to assess Olson's notions in the light of these elaborations. The patterns that do emerge, however, will not change the general picture already obtained. There is no consistent support for Olson's theory in the present study. Rather, patterns and consistencies in the data that do emerge suggest shortcomings and needed revisions in Olson's theory, at least as it applies to social movement organizations seeking public goods.

### Summary by Group Size Operationalizations

We may begin an elaboration of results by referring to the more detailed breakdown of group size operationalizations that are presented in Table 5.10. Some differences are apparent in the way these different operationalizations support the various hypotheses, but no operationalization shows a pattern of consistent support for all of the hypotheses. In general, the "believe support" and "believe chapter size" operational definitions of group size show most consistent support for the hypotheses, while the "member/not member" and "hold office/not hold office" operationalizations show the least support. There may be some basis for arguing that this difference between definitions of size is interpretable as mildly supportive of Olson's model, since the "perceived"

TABLE 5.10  
SUMMARY OF SUPPORT FOR HYPOTHESES BY GROUP SIZE OPERATIONALIZATIONS

HYPOTHESES BY GROUP OPERATIONALIZATIONS	TOTAL SUPPORT/TESTS	(%)
<b>OLSON HYPOTHESIS<sub>1</sub>:</b> Public goods incentives are higher in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	9 of 25 11 of 25 16 of 25 4 of 18 40 of 93	(36) (44) (64) (22.2) (43)
Total support all groups		
<b>OLSON HYPOTHESIS<sub>2</sub>:</b> Private goods incentives are lower in small than in large groups Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	11 of 20 12 of 20 3 of 20 1 of 14 27 of 74	(55) (60) (15) (7.1) (36.5)
Total support all groups		
<b>OLSON HYPOTHESIS<sub>3</sub>:</b> Social pressure incentives are higher in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	3 of 3 3 of 3 2 of 3 1 of 3 9 of 12	(100) (100) (66.6) (33.3) (75)
Total support all groups		
<b>REFINED HYPOTHESIS<sub>1</sub>:</b> Public good personal utility incentives are greater in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	0 of 1 0 of 1 1 of 1 0 of 1 1 of 4	(0) (0) (100) (0) (25)
Total support all groups		
<b>REFINED HYPOTHESIS<sub>2</sub>:</b> Public good general utility incentives are greater in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	1 of 1 0 of 1 1 of 1 1 of 1 3 of 4	(100) (0) (100) (100) (75)
Total support all groups		
<b>REFINED HYPOTHESIS<sub>3</sub>:</b> Public good contingency efficacy incentives are greater in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	0 of 1 1 of 1 0 of 1 0 of 1 1 of 4	(0) (100) (0) (0) (25)
Total support all groups		
<b>REFINED HYPOTHESIS<sub>4</sub>:</b> Public good contributory efficacy incentives are greater in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	0 of 1 0 of 1 1 of 1 0 of 1 1 of 4	(0) (0) (100) (0) (25)
Total support all groups		
<b>REFINED HYPOTHESIS<sub>5</sub>:</b> The positive difference between small and large groups is greater for personal utility than for general utility. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	1 of 1 1 of 1 1 of 1 0 of 1 3 of 4	(100) (100) (100) (0) (75)
Total all groups		

TABLE 5.10 (continued)

HYPOTHESES BY GROUP OPERATIONALIZATIONS	TOTAL SUPPORT/TESTS	(%)
<b>REFINED HYPOTHESIS<sub>6</sub>:</b> The positive difference between small and large groups is greater for contingency efficacy than for contributory efficacy.		
Consistently believe support for ZPG is small/large	0 of 1	(0)
Believe chapter size is under 55/over 150	0 of 1	(0)
Member local chapter/not member local chapter	1 of 1	(100)
Presently hold office/not hold office	1 of 1	(100)
Total all groups	2 of 4	(50)
<b>REFINED HYPOTHESIS<sub>7</sub>:</b> Public good personal utility incentives are higher than public good general utility incentives.		
Consistently believe support for ZPG is small/large	0 of 1	(0)
Believe chapter size is under 55 - small group over 150 - large group	0 of 1	(0)
Member local chapter - small group	0 of 1	(0)
Not member of local chapter - large group	0 of 1	(0)
Presently hold office - small group	0 of 1	(0)
Presently not hold office - large group	0 of 1	(0)
Total for all groups	0 of 8	(0)
<b>REFINED HYPOTHESIS<sub>8</sub>:</b> Public good contingency efficacy incentives are higher than contributory efficacy incentives.		
Consistently believe support for ZPG is small/large	0 of 1	(0)
Believe chapter size is under 55 - small group over 150 - large group	0 of 1	(0)
Member local chapter - small group	0 of 1	(0)
Not member of local chapter - large group	0 of 1	(0)
Presently hold office - small group	0 of 1	(0)
Presently not hold office - large group	0 of 1	(0)
Total for all groups	0 of 8	(0)
<b>REFINED HYPOTHESIS<sub>9</sub>:</b> Private goods information incentives are lower in small than in large groups.		
Consistently believe support for ZPG is small/large	1 of 1	(100)
Believe chapter size is under 55/over 150	1 of 1	(100)
Member local chapter/not member local chapter	0 of 1	(0)
Presently hold office/not hold office	0 of 1	(0)
Total for all groups	2 of 4	(50)
<b>REFINED HYPOTHESIS<sub>10</sub>:</b> Private goods interaction incentives are lower in small than in large groups.		
Consistently believe support for ZPG is small/large	1 of 1	(100)
Believe chapter size is under 55/over 150	1 of 1	(100)
Member local chapter/not member local chapter	0 of 1	(0)
Presently hold office/not hold office	0 of 1	(0)
Total for all groups	2 of 4	(50)
<b>REFINED HYPOTHESIS<sub>11</sub>:</b> Other private goods incentives are lower in small than in large groups.		
Consistently believe support for ZPG is small/large	1 of 1	(100)
Believe chapter size is under 55/over 150	1 of 1	(100)
Member local chapter/not member local chapter	0 of 1	(0)
Presently hold office/not hold office	0 of 1	(0)
Total for all groups	2 of 4	(50)

TABLE 5.10 (continued)

HYPOTHESES BY GROUP OPERATIONALIZATIONS	TOTAL SUPPORT/TESTS	(%)
REFINED HYPOTHESIS <sub>12</sub> : Contributions will be greater in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150	0 of 1 0 of 1 0 of 2	(0) (0) (0)
Total for all groups		
REFINED HYPOTHESIS <sub>13</sub> : Individual gain is higher in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	1 of 1 1 of 1 0 of 1 0 of 1 2 of 4	(100) (100) (0) (0) (50)
Total for all groups		
REFINED HYPOTHESIS <sub>14</sub> : The ratio of public to private goods is higher in small than in large groups. Consistently believe support for ZPG is small/large Believe chapter size is under 55/over 150 Member local chapter/not member local chapter Presently hold office/not hold office	1 of 1 1 of 1 0 of 1 0 of 1 2 of 4	(100) (100) (0) (0) (50)
Total for all groups		
SUMMARY OF ALL GROUPS		
Consistently believe support for ZPG is small/large	30 of 64	(46.9)
Believe chapter size is under 55/over 150	33 of 64	(51.6)
Member local chapter/not member local chapter	26 of 63	(41.3)
Presently hold office/not hold office	8 of 50	(16.0)
TOTAL FOR ALL GROUPS	97 of 241	(40.2)

operationalizations (which do provide more support) are closer to Olson's notion of size than the others. However, the difference between the "perceived" operationalizations and the "member/not member" operationalizations is less than 11 percent; such a small difference cannot be regarded as providing significant support for Olson.

#### Magnitudes of Incentives and Magnitudes of Differences

The bulk of the analysis thus far has focused on whether incentive differences between small and large groups support hypotheses derived from the Olson theory. Any difference in the direction predicted by the hypotheses--regardless of magnitude--has been counted as supportive evidence. A consideration that has not been stressed in the analysis up to this point is that the differences between small and large groups are quite uniformly small in magnitude. Further, as can be seen in Table 5.11, the differences that support the hypotheses are *smaller*, on the average, across all tests ( $\bar{x}$  difference = 1.727), than the differences which do not support the hypotheses ( $\bar{x}$  difference = 1.962).

Thus, not only do the hypothesis tests reveal a lack of directional consistency, but also a lack of over-all strength, given the fact that the differences supporting the hypotheses are smaller in magnitude than those not lending support.<sup>4</sup>

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<sup>4</sup>The detailed data on magnitudes of differences are given in Appendix C, Tables C.1, C.2 and C.3.

TABLE 5.11  
DIFFERENCES IN SUPPORT OF HYPOTHESES BY GROUP SIZE\*

Group Size Operationalizations	Mean Dif- ferences Support	Mean Dif- ferences No Support	Mean All Differ- ences
Consistently believe support for ZPG small/large	1.203	1.312	1.26
Believe chapter size under 55/over 150	1.262	1.742	1.491
Member local chapter/not member local chapter	2.495	3.367	2.971
Presently hold office/ presently not hold office	2.789	1.439	1.684
Mean differences all tests	1.727	1.962	1.863

\* Detailed table in Appendix C.

Table 5.12 shows some other important information about incentive magnitudes relevant for assessing the relationships between my ZPG data and Olson's model. For example, since ZPG is overall a large group, private goods incentives should be higher in magnitude for the organization as a whole than public goods incentives, if Olson's model is correct. As Table 5.12 clearly indicates, however, this is not the case. If anything, the reverse of Olson's theoretical expectation is true (i.e., see results for public total and private total in Table 5.12), and this holds for all the various operationalizations of group size.

It is also apparent, however, that certain types of private goods incentives do rank higher in magnitude than certain types of



TABLE 5.12  
INCENTIVE VALUES BY GROUP SIZE OPERATIONALIZATIONS

INCENTIVE	INCENTIVE VALUE	INCENTIVE	INCENTIVE VALUE
<u>CONTRIBUTORY EFFICACY</u>			
Consistently believe support for ZPG is small	89.4	Consistently believe support for ZPG is small	72.8 +
Consistently believe support for ZPG is large	92.9	Consistently believe support for ZPG is large	76.3 +
Believe chapter size is under 55 - small	88.1	Believe chapter size is under 55 - small	75.4 +
Believe chapter size is over 150 - large	92.7	Believe chapter size is over 150 - large	76.4 +
Member local chapter - small	90.5	Member local chapter - small	75.4
Not member local chapter - large	89.5	Not member local chapter - large	71.1
Presently hold office - small	88.4	Presently hold office - small	76.8
Presently not hold office - large	90.5	Presently not hold office - large	72.3
<u>GENERAL UTILITY</u>			
Consistently believe support for ZPG is small	83.8	Consistently believe support for ZPG is small	53.4
Consistently believe support for ZPG is large	83.0	Consistently believe support for ZPG is large	55.5
Believe chapter size is under 55 - small	82.4	Believe chapter size is under 55 - small	59.5 +
Believe chapter size is over 150 - large	82.8	Believe chapter size is over 150 - large	60.1 +
Member local chapter - small	84.5	Member local chapter - small	57.8
Not member local chapter - large	82.0	Not member local chapter - large	47.8
Presently hold office - small	85.0	Presently hold office - small	61.8
Presently not hold office - large	82.8	Presently not hold office - large	50.3
<u>PERSONAL UTILITY</u>			
Consistently believe support for ZPG is small	66.5	Consistently believe support for ZPG is small	35.6 +
Consistently believe support for ZPG is large	68.2	Consistently believe support for ZPG is large	37.8 +
Believe chapter size is under 55 - small	66.5	Believe chapter size is under 55 - small	40.67
Believe chapter size is over 150 - large	68.9	Believe chapter size is over 150 - large	44.4 +
Member local chapter - small	66.9	Member local chapter - small	41.2
Not member local chapter - large	63.6	Not member local chapter - large	27.7
Presently hold office - small	65.0	Presently hold office - small	45.0
Presently not hold office - large	65.4	Presently not hold office - large	31.5
<u>CONTINGENCY EFFICACY</u>			
Consistently believe support for ZPG is small	58.6	Consistently believe support for ZPG is small	53.1 +
Consistently believe support for ZPG is large	60.2	Consistently believe support for ZPG is large	56.1 +
Believe chapter size is under 55 - small	58.7	Believe chapter size is under 55 - small	59.2 +
Believe chapter size is over 150 - large	56.0	Believe chapter size is over 150 - large	60.4 +
Member local chapter - small	57.9	Member local chapter - small	58.2 +
Not member local chapter - large	61.6	Not member local chapter - large	49.1 +
Presently hold office - small	57.0	Presently hold office - small	61.4 +
Presently not hold office - large	60.5	Presently not hold office - large	51.5 +
<u>TOTAL PUBLIC GOODS INCENTIVES</u>			
Consistently believe support for ZPG is small	73.1	Consistently believe support for ZPG is small	28.5 +
Consistently believe support for ZPG is large	74.1	Consistently believe support for ZPG is large	25.1 +
Believe chapter size is under 55 - small	72.5	Believe chapter size is under 55 - small	31.9 +
Believe chapter size is over 150 - large	73.1	Believe chapter size is over 150 - large	27.9 +
Member local chapter - small	73.3	Member local chapter - small	29.1 +
Not member local chapter - large	72.7 +	Not member local chapter - large	27.8 +
Presently hold office - small	72.4	Presently hold office - small	27.6
Presently not hold office - large	73.2	Presently not hold office - large	28.7

public goods incentives. These specific differences also hold true for all of the group size operationalizations. In other words, public and private goods incentives are *mixed* in their ranking with only certain public goods tending to predominate. These patterns strongly suggest that most ZPG members share common incentives which transcend group size, however group size may be defined. This common ranking pattern, which emerges for all group operationalizations when the magnitudes of the indexed items are compared, is as follows:

1. Contributory efficacy
2. General utility
3. Information
4. Total public goods
5. Personal utility
6. Contingency efficacy, other private, and total private (approximately equal)
7. Interaction
8. Social pressure

These results strongly suggest that there exists a *commonality* of *mixed* public and private incentives among ZPG members that is both stronger in magnitude and more consistent than the differences predicted by Olson's model on the basis of group size. The fact that "contributory efficacy" and "general utility" rank above the more strictly conceived Olson concepts of "contingency efficacy" and "personal utility" is also evidence that casts some doubt on the power of Olson's theory to explain contributions within ZPG.

#### The Value of Information Incentives: Private and Public Aspects

ZPG is a "purposive" social movement organization (see Chapter 1 for discussion of this). The relatively high value placed by members on questionnaire items measuring public goods indicates that,

regardless of group size considerations, purposive incentives play a fundamental role in inducing contributions. However, the relatively high value given to "information"--which Olson takes to be a private good--also indicates that some private goods are also important incentives in ZPG. In short, as we have already seen, the organization offers a mixture of incentives.

This notion of a mixture of private and public incentives is further bolstered when we recall that "information" itself need not always be viewed as strictly a private good in Olson's sense. As noted earlier (Chapter 3), public dissemination of information is one of the organizational *means* used to achieve the *public* good. Thus, non-contributors can eventually obtain the same information as contributors. What is unique about information in this case is its relation to the public good; i.e., it cannot be separated from the public good except in the abstract.

"Information" is seldom cited as the most important reason for belonging to ZPG when the various incentives are explicitly listed to be ranked by respondents, although it does achieve a relatively high ranking. However, when responses to open-ended questions are analyzed, "information" clearly emerges as a very important incentive. Typical responses to the question, "What do you feel you personally gain, if anything, from membership in ZPG?", are listed below to illustrate the value placed on information incentives by ZPG members:

"Information of population trends, politics, etc."

"Detailed facts and information on population issues."

"Up-to-date information on family planning, abortion, population, immigration - facts and legislation."

"Information on an important effort."

"Information and a group of people who share some of my socio-political views. Information clearing-house; political info and feedback; direct lobbying action on congress and executive branch; financial and material resource helpful for the chapter."

"Great deal of informative material on birth control, population, abortion, immigration, laws and changes. Materials which I really enjoy receiving to keep up on all that is happening in an area that I am interested in and concerned about."

"Opportunity to explore local implications of ZPG and to debate issues with other concerned and informed people. Information in publications, notice of timely lobbying issues, from both a feeling of being a good citizen and practicing what I preach."

"Since there is no local chapter, I gain much information and emotional support from my national membership. I sometimes feel like a one-woman ZPG chapter here since the information I gain from ZPG and the National Reporter I pass on to organizations and the community in my population lectures, and to the Board of Directors of our Planned Parenthood group. My major personal gain, since I feel so strongly about the human over-population problem in the world today, I feel that ZPG is working hard in the direction of population control and concern for the environment, especially in efforts to influence population legislation."

The last two examples of "information" responses illustrate especially well the mixture and the subtle blending of public and private goods incentives. Members use organizationally provided information, not just as a source of private gain, but also to "further the cause." The above sample responses also illustrate the fact that information incentives for ZPG members are inextricably mixed; i.e., there is no way to empirically separate them into pure public or pure private goods incentives. ZPG members may very well get private gains from the information they receive, but they also feel so strongly about population control that they support the organization simply because it provides them with information to

use in educating others about the problem. Thus, for many ZPG members, it is not just the information per se but also the potential use of that information which provides the incentive; the private good incentive is enhanced by its potential for aiding in production of the public good.

Finally, it should be noted that the information incentive was not found to be either strongly or consistently related to group size considerations.

#### Public Goods Incentives: Personal and General Utility

Inspection of the relative value of the strictly public goods incentives again points out the general lack of differences between any operationalizations of group size; i.e., the range of values for the individual items over the eight categories of group size differs no more than five percent (see Table C.6 in Appendix C). Of particular interest here is that Olson's theory leads us to expect that contingency efficacy and personal utility will be the predominant goods incentives in small groups. However, only two of eight tests support the hypotheses that the indices for these incentives will have higher value in small groups. Instead, the highest values, regardless of group size, are achieved by "contributory efficacy" and "general utility" (ranges 88-93 and 82-85, respectively, as compared to 56-62 for contingency efficacy and 64-69 for personal utility; see Table C.6 in Appendix C).<sup>5</sup>

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<sup>5</sup>The hypotheses involving these concepts (Refined Hypotheses 7 and 8) for the whole sample were the only hypotheses that received no support, meaning that in their reverse form they would be supported with total consistency.

These results must once more call into question Olson's expectation that contributions are contingent on personal gain, at least for members of ZPG. Perhaps in the economic sphere persons do tend to calculate personal "gain" possibilities and then make their contributions contingent on receiving benefits. However, in the type of collective action represented by a social movement organization like ZPG, other considerations appear to take precedence. Such considerations are perhaps best illustrated from the following examples of additional responses to the open-ended question, "What do you personally gain, if anything, from ZPG?"

"A sense of contributing to population stabilization awareness."

"It's better than doing nothing (and sometimes it's even a tool for doing *something*)."

"Satisfaction that efforts are being made to control population."

"I gained the feeling that at least I am trying - just wish it was more effective."

"The knowledge that I'm helping, even if in only a small way."

"The inner satisfaction that I am doing something towards population control."

"I personally gain nothing but I feel good encouraging a good cause."

"It gives me personal satisfaction to practice and work for what I preach."

"Nothing directly - only as the world gains."

"Personally little or nothing. Giving my offspring a living chance."

"I am supporting an activity which will (may) lead to the degree of public awareness that *might* support a rational population policy - admittedly a dubious proposition."

"I'm not trying to gain anything, I'm trying to help do something to solve a serious and largely un-recognized problem. On the local level, the fact that I enjoy working with the other involved chapter members is a fringe benefit. On the national level, the only fringe benefit I can think of is the newsletter."

As indicated by the typical responses cited above, many ZPG members do not make contributions in order to make personal gain, nor do they make their contributions contingent on delivery of certain goods. Over six percent of the respondents actually felt that they gained absolutely "nothing" personally from their contributions (see Table 5.4). What, then, is the incentive for contribution? Satisfaction from helping a good cause, doing something about an important problem, and contributing toward the public good without expectation of an immediate or concrete "gain." Members do not in general appear to closely calculate whether their contribution makes a perceptible or noticeable difference; it is only important that a contribution may possibly "help" to make a difference in the outcome. Members are aware that their individual support may not make much of a difference, but they are also aware that the probability of ultimate success hinges upon the cumulation of individual contributions.

Two typical responses that exemplify this orientation are: "One more added to the ranks of ZPG and its goals. The knowledge that I'm helping, even in a small way. The wider the supporting membership the more effective the lobbying." Contributory efficacy and general utility incentives (represented by the above two responses) do, in fact, have the highest value for all members of ZPG, again regardless of "group size" definitions.

It might be argued that the concept of "general utility" (in contrast with "personal utility") violates the assumptions of Olson's theory by introducing interests that are considerably broader than the "self-interests" assumed by the theory. It might

also be argued that "satisfaction of doing something to help a good cause" is a private or, in Olson's terms, a moral incentive.<sup>6</sup> Yet, it is clear that, while ZPG members' motives go beyond a narrow definition of self-interest and involve moral incentives, ZPG is not a philanthropic organization, nor do contributions function mainly to relieve guilt or to produce the good feeling that comes from a moral act. Instead, I believe the most outstanding feature of ZPG members' incentives is the way self-interests are inextricably blended and made compatible with interests that go beyond self. In other words, the evidence from this study suggests that not only do ZPG members believe that what they want is morally right for themselves but also that it is morally imperative for society as a whole. This, of course, is the generic hallmark of the ideologies of many, if not all, collective action efforts (social movements) that seek *public* collective goods.

#### Implications for Collective Action in Social Movements

It is a fundamental assumption of Olson's theory (as it is for most of economic theory in general) that individuals develop personalized *alternatives* to goods sought in all collective action efforts. However, as Hirschman (1970) has pointed out, this assumption may not be true, for certain kinds of collective action goods, particularly the *public* variety. It is true, for example, that a

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<sup>6</sup>When open-ended statements of this type were coded both as private and public goods, i.e., "satisfaction" was considered a private component, "help a good cause" was considered a public component, while a coding of "mixed" was assigned in the summary of all items.



factory worker or teacher may decide not to contribute to a collective action that seeks to achieve higher wages, because that person may think (1) the good will be obtained anyway by virtue of the collective action of others who are perceived as also giving utility to the good, and/or (2) personal, individual efforts to achieve higher wages (perhaps in another plant, by harder work, etc.) involve less cost and/or are less risky than collective action.

When a *public* good is in question, however, especially one that pertains to the whole community or society in general, the kinds of individual alternatives considered above may not exist. In the case of ZPG, a person will soon perceive that there is no way to individually obtain the benefits that zero population growth (or population control) would produce, or to escape, as an individual, the costs that continued population growth would impose on everyone. Thus, when a public good is not collectively obtained, there exist no individual alternative sources of the good, and the individual must eventually suffer a public "evil." As Hirschman puts it, a "no exit" situation is created; i.e., some people come to feel that they cannot escape the general evil that will befall everyone and therefore have no meaningful alternative but to support collective action aimed at producing the public good, regardless of the likelihood that such collective action will actually produce the desired results.

Much of this study's findings tend to be more supportive of Hirschman's more general ideas concerning the basis of collective action than Olson's more specific economic model. ZPG members in

general feel that unless some counteractive efforts are made now--no matter how modest these may be initially--the "public evil" of overpopulation will eventually be forced upon all future members of society. Therefore, ZPG members express considerable willingness to support any effort to control population, regardless of specific personal payoff contingencies.

Most ZPG members appear to realize that no collective good can ever be created if each person attempts to be a "free rider." Contributions without payoff contingencies represent, in economical terms, an "irrational" response. Nevertheless, absence of this type of "irrational" behavior will *guarantee* the absence of collective action. Thus, given a public good that has high utility for the individual, there is no "logic" in avoiding collective action, even when the group is large.

In short, "logic of collective action" may, for members of a social movement, differ from the logic operating in other kinds of groups. "Self-interest" in social movement organizations is not so much related to the amount of "gain" immediately expected as it is to the value placed by individual members on the desired public good. So, in social movements, if a good which can be achieved only by collective action has a high enough value to the individual, then logic would dictate a contribution *regardless* of perceptibility, noticeability, or group size. In addition, if the good is viewed in general moral terms as well as in terms of "self-interest" (its value to the individual), avoiding a contribution should appear to members as being both illogical and *immoral*. There seems to be

little doubt that ZPG members, in effect, "see around" the logic of collective action, as Gamson (1975) suggests.

## CHAPTER 6

### CONCLUSIONS

#### GENERAL OVERVIEW

Olson's theory does not completely lack support in this study, but the support it receives is neither consistent nor strong. The general picture emerging from my findings should certainly lead one toward an open-minded scepticism concerning Olson's logic of collective action model, at least insofar as his theory is applied to social movement groups that seek public goods, such as ZPG.

Findings of this study which are particularly incompatible with Olson's theory are the weak and inconsistent incentive differences between large-small group distinctions. Public good incentives of the general utility and contributory efficacy types predominate for ZPG members regardless of group size operationalizations, instead of the personal utility and contingency efficacy types predicted by Olson's model.

"Information" viewed as a private good ranks relatively highly as an incentive for all group size operationalizations. However, closer analysis suggests that information incentives involve a blending of public and private incentives that cannot readily (or realistically) be separated. Similarly, there is a strong "moral" component in ZPG members' incentives, again regardless of group size. But there is little basis for thinking that this represents

## APPENDICES

only a private gain for members, since ZPG members clearly think that what is good for them individually is good for everyone.

Overall, then, results of this study suggest that ZPG member contributions are not primarily based on a careful calculation of the size of the specific, immediate, or direct personal "gain" resulting from contributions made. Instead, the incentive factors that combine to provide the primary genesis of member contributions appear to be the high magnitude of the value ZPG members place on the good they seek, their completely blended perception of the morality for themselves and for society in obtaining this good, and their realization that avoiding a contribution will result in a public evil. High utility for goods, the blending of self and other interests in a moral context, and the perception of no individual alternatives for the good or for escaping an evil are *central ideological* features underlying many of the collective action efforts that come to be identified as social movements. My analysis indicates that incentives for collective action seeking such "public" goods are quite different from those which Olson proposes for groups where relatively moderate utility, strict self-interest and individual alternatives may be assumed.

#### LIMITATIONS AND SUGGESTED RESEARCH

Obviously the present study is far from definitive. Perhaps its main contribution is in gaining some precision on certain worthwhile questions about collective action that have developed in the process of translating an explicit but still very general theory like Olson's into a specific research problem. Certainly there is

now some basis for the following questions: (1) Are all of the specific hypotheses tested in this study actually implied in Olson's model? (2) Does an organization like ZPG represent an appropriate group for testing Olson's model? (3) Are the specific organizational definitions of group size, public goods, private goods, and social pressure incentives appropriate?

Since Olson does not provide specifics on how his theory might be tested, the general strategy I have employed has been to develop a number of hypotheses that seemed to be reasonable while providing different, possible ways of looking at the general notion Olson presents. Similarly, various operationalizations of group size and of public and private goods have been employed simply to cover a greater part of the range of possibilities suggested but not concretely outlined by Olson. The fact that none of the hypotheses (at least the more crucial ones on private and public goods incentives) receives consistent support in any of the operationalizations does not, of course, "prove" Olson's theory wrong, but it does suggest that factors operating in the kind of SMO studied here may exceed the power of Olson's model to satisfactorily explain them.<sup>1</sup>

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<sup>1</sup>Olson clearly favors collective action in the market realm as the most appropriate for showing the validity of his theory, but he does not exclude organizations like ZPG. Since ZPG is a large, latent group that *has* mobilized, it should show, on the whole, some of the tendencies toward private good predominance, and at least *some* of the large and small size operationalizations developed within ZPG should show relatively strong consistency with Olson's theory if it is to be regarded as generally valid. It is the case that there are not many private incentives available to ZPG members, but Olson does not imply that a multitude of private incentives need to be offered.

It is also true that the private incentives in ZPG are not "pure" in the sense that they are clearly separated from the public goods incentives. Is a good with a "moral" component strictly a private good, or could it actually exist without the public good component? Is Olson's theory only testable on an organization in which public and private goods can be separated empirically and realistically denied to non-contributors? Does such an organization really exist outside of theory?<sup>2</sup> It is suggested strongly by my data and by more careful consideration of Olson's examples that empirically it may be impossible to separate public and private goods incentives. However, more research is required before this question can be clearly answered.

These are but a few of the questions raised in this study. Future research designed to test Olson's theory should surely attempt to address these questions more thoroughly. Specifically, further research might fruitfully investigate the following suggestions:

1. Compare separate and distinct small and large organizations in instances where both organizations are engaged in collective action toward the production of an identical public (or collective) good.

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<sup>2</sup>For example, Olson cites professional journals as private goods available only to contributors to professional associations. The American Dental Association is a professional organization lobbying for legislation favorable to dentists--but also protective of patients' interests. The *ADA Journal* provides material strictly related to the practice of dentistry, but also at least 25 percent of the *Journal* is devoted to articles relative to legislation protective of dentists' interests and also protecting patients from the dangers of treatment by unqualified persons. (Specific examples can be provided upon request.)



2. Study the process whereby persons are initially recruited into the organization, before organizational socialization has an opportunity to change incentives and make them homogeneous with those of other members.
3. Study collective action over time, since much sociological theory (Michels, Zald and Ash, etc.) suggests that private goods become increasingly important over time.
4. Give attention to very precise measures of public and private goods incentives, including the differentiation of the personal/general utility and contributory/contingency efficacy distinctions developed here.
5. Research should attempt to determine how different incentives may be empirically separated, and/or blended and ranked, and whether, in fact, distinct public, private, and social pressure incentives may ever be empirically separated in a meaningful way.
6. Research should attempt to determine whether social movement organizations are basically the same or inherently different from other types of collective action organizations. This differentiation would be crucial to answering questions about incentives to contribute to collective action. If social

movement organizations are inherently different from other types of collective action organizations, then it would seem to follow that social movement incentive systems are also inherently different. But this latter proposition is yet another question for research to answer.

### CONCLUSION

In conclusion, then, more questions were raised than answered by this study. Generally speaking, Olson's theory of the logic of collective action does not seem to apply as well to collective action in social movement organizations as it might for organizations implicated in economic considerations. Public and private goods incentives are inextricably mixed in social movements and possess a "moral" component which itself may be a primary incentive for contributing to collective action. The relative value of the public good for ZPG members seems to transcend the group size and immediate, personal "gain" components of Olson's theory. Therefore, further research is suggested to answer some of the questions raised here, including whether or not the relative value of the public good is the driving force behind contributions to collective action in social movements.

**APPENDIX A**

**ZERO POPULATION GROWTH, INC.**

## ZERO POPULATION GROWTH, INC.

Zero Population Growth, Inc., was organized in late 1968 around Paul Ehrlich, who remains to this day as Honorary President. The original group soon became too large to operate as a single unit, so it was divided into local chapters with a national headquarters opened in Palo Alto, California, near the location of the original group. The organizational structure which developed provides for a 60 member Board of Directors who may be nominated by the general membership but are elected by the existing Board of Directors. Since this Board of Directors meets only twice a year, they choose an Executive Board which meets regularly (usually bi-monthly) and provides policy guidelines for the Executive Director and staff of the National office, whom the Executive Board hires to run the organization. In 1974 the National headquarters moved to Washington, D.C., to be closer to other organizations with similar interests and also to facilitate lobbying in Congress.

Membership in ZPG is open to anyone and members receive each month the newspaper (*The National Reporter*) and "Population Politics", a newsletter describing lobbying control so that members may send letters to support the ZPG position on such legislation. In addition, members receive special handouts and reports to supplement the information provided in the monthly publications. ZPG headquarters acts as a resource materials center for all members.

Members are automatically placed on the rolls of a local chapter if one is near, but they need not actively participate or pay dues locally. They are considered members of ZPG so long as they pay dues to the National organization, and this is their only responsibility in the organization.

ZPG chapters are formed by application to the National Chapter Chairman, and approval is almost automatic so long as at least ten members are in the group applying for the charter. Chapters exist so long as there is any chapter activity. Each chapter receives a portion of its members' national dues to use for local activities as well as aid and advice from the national office upon request. However, the national office has no power at the local level, and each group has its own by-laws, officers, dues, policies, and activities decided at the local level.

Larry Barnett (Barnett, 1971, 1974) did two excellent surveys of ZPG members in 1970 and 1971 which revealed the following characteristics: ZPG members were more likely to be better educated, have higher incomes, and be more active politically than the general population at that time. Almost half were students, primarily at the college level, but even non-students were predominantly youthful (under 40). Members were less likely to be Catholic and few minority group members were represented, but members were more likely to have no religion or be Jewish than the general population. Only about five to ten percent were considered active in chapters, but 43 percent belonged to some other environmental organization. The demographic characteristics did not seem to determine behavior or attitudes among sample members, with the one exception that younger

females in the second survey planned families of a size they believed would halt population growth.

ZPG members overwhelmingly favored the principle that abortion and vasectomy should be legally available although many did not personally favor either. However, members did not agree that the government should limit family size, and only about half believe in tax changes to penalize larger families. Thus, there was general consensus on the problems related to overpopulation and to the use of political means to solve them, but no general consensus concerning individual desire for those public goods.

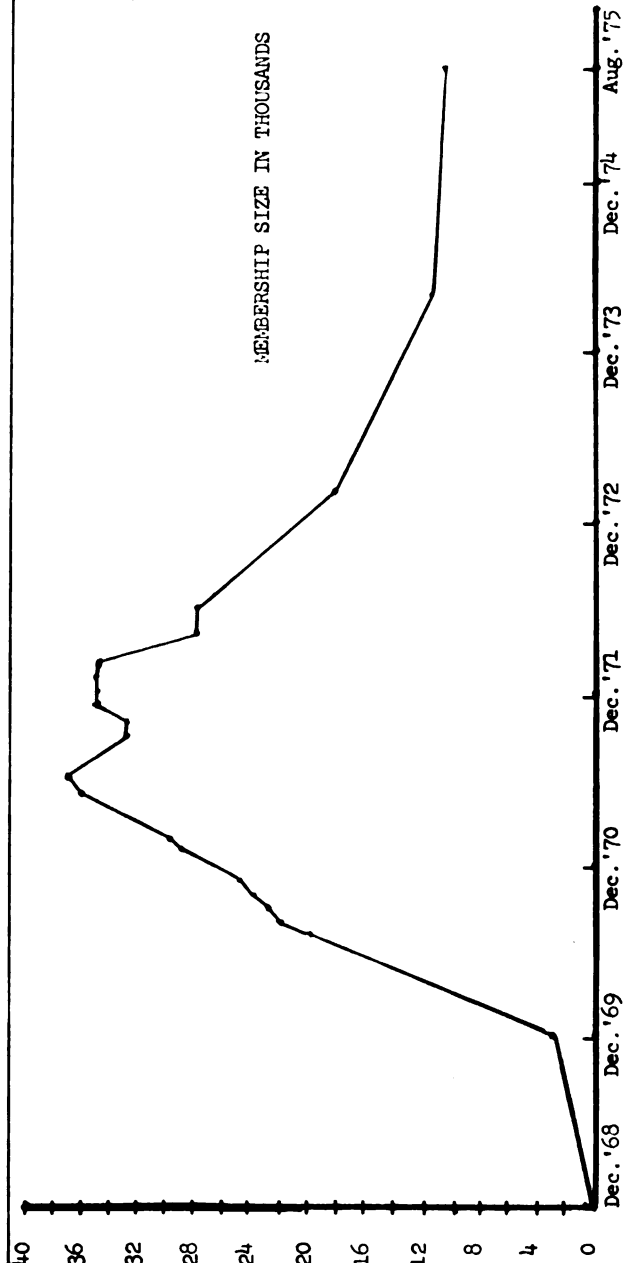
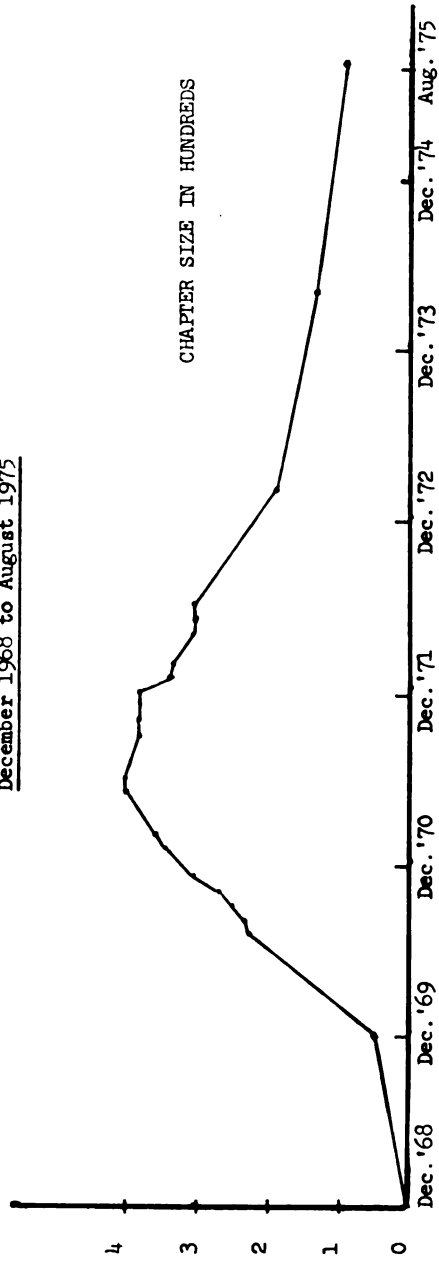
Membership in ZPG is widely dispersed geographically, but at the same time often concentrated in areas of high population density (geographical location of chapters and members is listed below).

TABLE A.1  
NUMBER OF MEMBERS BY STATE AND ACTIVE CHAPTER SIZE IN STATE

STATE	SMALL (N)	CHAPTER SIZE IN STATE		LARGE (N)	TOTAL NUMBER ACTIVE CHAPTER MEMBERS	TOTAL NUMBER OF MEMBERSHIPS IN STATE*
		MIDDLE (N)	SMALL (N)			
California	4	4	3	3	1876	2752
New York	3	1	1	1	812	1163
Massachusetts	1	-	1	1	488	568
Pennsylvania	1	2	1	1	460	470
Michigan	1	2	-	-	220	460
Illinois	-	1	-	-	131	451
Ohio	2	1	-	-	167	436
New Jersey	-	1	-	-	109	403
Florida	3	2	-	-	309	397
Wisconsin	-	-	1	1	158	374
Connecticut	-	-	1	1	255	359
Colorado	1	-	1	1	206	348
Minnesota	-	1	1	1	278	344
Washington	2	-	1	1	227	344
Texas	-	2	-	-	144	311
Virginia	3	-	-	-	108	265
Maryland	-	1	-	-	146	263
Oregon	-	-	-	-	-	219
New Mexico	-	1	-	-	78	186
Missouri	-	-	-	-	-	162
Indiana	1	-	-	-	12	161
North Carolina	-	-	-	-	-	131
Arizona	-	-	-	-	-	130
Vermont	-	-	-	-	-	129
Kansas	2	-	-	-	54	122
Iowa	-	-	-	-	-	116
Hawaiian Islands	-	1	-	-	77	112
New Hampshire	1	-	-	-	50	100
Georgia	1	-	-	-	25	72
Tennessee	1	-	-	-	13	68
Maine	1	-	-	-	35	67
Nebraska	1	-	-	-	39	66
Utah	-	1	-	-	61	65
Kentucky	1	-	-	-	28	56
Alabama	1	-	-	-	14	55
Idaho	-	-	-	-	-	53
Oklahoma	-	-	-	-	-	51
Louisiana	-	-	-	-	-	48
Rhode Island	1	-	-	-	45	45
Alaska	-	-	-	-	-	45
Nevada	-	-	-	-	-	43
Montana	-	-	-	-	-	42
Delaware	-	-	-	-	-	39
Arkansas	-	-	-	-	-	34
West Virginia	-	-	-	-	-	33
South Carolina	-	-	-	-	-	32
South Dakota	-	-	-	-	-	27
North Dakota	-	-	-	-	-	25
Wyoming	-	-	-	-	-	15
Mississippi	-	-	-	-	-	12
Totals	32	21	11		6625	12,269

\* Includes memberships held by institutions or other organizations, i.e., colleges, libraries, Planned Parenthood Chapters, etc. Actual individual members total 11,524, including members in active and inactive chapters and members with no chapter affiliation.

MEMBERSHIP AND CHAPTER SIZE:  
December 1968 to August 1975





## **A Statement of the Goals of Zero Population Growth, Inc.**

The long term survival of the human species is dependent upon the establishment of an equilibrium between human demands and the carrying capacity of nature. The earth and its resources of land, air, water, and minerals are finite, and therefore there are limits to the cumulative demands which can be placed upon them. In addition, the earth and its resources and the users of those resources comprise a series of intricately complex ecological systems. No demand or action can be considered in isolation; all things are interconnected.

Foremost among the pressures on the boundaries of finity and ecological balance is the strain of a growing human population now numbering in the billions. The number of human beings that the earth can support is a function of the per capita demands of those individuals. It is preferable to support a smaller number of human beings at an equitable and sufficient standard of living than a greater number at a lesser level.

Zero Population Growth, Inc. (ZPG) concerns itself primarily with the United States, but these principles are universal.

ZPG has adopted a limited number of broad goals to guide its activities:

1. ZPG believes that the present population of the United States exceeds the optimum level for the continued well-being of its citizens. ZPG therefore advocates the achievement, by voluntary means, of an end to U.S. population growth by 1990, and a reduction in U.S. population size thereafter. Among the conditions necessary to achieve this goal, ZPG stresses: freedom of access for every person to all means of voluntary birth control; a major research effort to develop safer and more effective means of birth control; complete equality of opportunity for all women and men; and removal of all legal and societal pro-natalist pressures. The population size should stabilize at a substantially reduced level which will maximize diversity, freedom of choice, and the quality of life for all.

2. ZPG believes that land is a resource too important to human survival to be subjected to misuse. Ecological land use planning is essential in determining the appropriate patterns of distribution of people on the land, and of migration between states and regions. Thoughtful land use planning at all levels of government is necessary to assure the long-range stewardship of the land and well-being of mankind.

3. ZPG believes that human activities are causing the rapid depletion of the world's available stock of mineral resources. Simultaneously those activities are resulting in increased pollution of land, air and water resources. ZPG therefore recommends 1) reduction in the rate of growth and eventual stabilization of United States consumption of non-renewable resources; and 2) rapid stabilization of total national energy consumption at least until environmentally sound sources are developed.

ZPG recognizes that none of its goals can be justified unless concurrently with their achievement adequate levels of income, health care, and educational opportunity are assured to all persons.

# SURVEY OF ZPG MEMBERS, 1975

Unless otherwise instructed, please circle the number which best represents your response to each question.  
Example: Are you a ZPG member? 1. Yes 2. No

1. When did you originally join ZPG? 1. 1969 (ZPG founded) 2. 1970 (First Earth Day) 3. 1971  
4. 1972 (Stockholm Environment Conference) 5. 1973 6. 1974 (Bucharest Population Conference)  
7. 1975

2. Is there a local ZPG chapter near you? 1. Yes 2. No 3. Don't Know  
If either of these are marked, skip question 3 and continue with question number 4, please.

3. Do you belong to the local ZPG chapter? 1. Yes 2. No 3. Formerly, now dropped  
If either of these are marked, skip the rest of this question and continue with question number 4, please.

A. How often do you attend local ZPG meetings?

1. Frequently 2. One or more times per year, but not frequently 3. Not at all

B. How many people do you think belong to your local chapter? (Fill in) \_\_\_\_\_

C. How many members usually attend the meetings you attend?

1. Less than 10 2. 10-20 3. 20-30 4. Over 30 5. I don't attend

D. To the best of your knowledge which of the following have been held by your local ZPG chapter in the last year, and which have you attended?

	Check if Meetings Held	Check if you have attended meetings
1. Informational or program meetings (including those sponsored by ZPG and open to non-members).	_____	_____
2. Primarily social meetings such as picnics, dinners, etc. at which program is not primary.	_____	_____
3. Business or program meetings open only to members.	_____	_____
4. Committee or planning sessions.	_____	_____
5. Other, please state _____.	_____	_____

4. Please circle your contributions to and activities in ZPG.

- A. Dues: 1. Local chapter 2. National
- B. Attend meetings: 1. Local chapter 2. National
- C. Write letters or send other information in behalf of ZPG and/or its policies. 1. Local or state issues 2. National issues
- D. Give speeches, serve on panel discussions, attend hearings, etc. 1. Local or state issues 2. National issues
- E. Work for candidates, referenda, favorable to ZPG policies. 1. Local or state 2. National
- F. Make monetary or material resource contributions in addition to dues. 1. Local ZPG 2. National ZPG

2.

5. Do you presently hold office or have you ever held office in ZPG?

A. At present: Local level: 1. Yes 2. No National level: 1. Yes 2. No

B. Formerly: Local level: 1. Yes 2. No National level: 1. Yes 2. No

6. Why do you belong to ZPG? (Please circle the number which best expresses your response to each statement.)

	A <u>crucially</u> important reason for my member- ship.	An impor- tant reason for my member- ship.	Of some- impor- tance for my member- ship.	Of very little impor- tance to my member- ship.	Of abso- lutely no impor- tance to my member- ship.
A. My contribution is helping to influence action on population control.	1	2	3	4	5
B. I personally gain much from the information I receive from ZPG.	1	2	3	4	5
C. Some important aspects of my life are threatened by population growth.	1	2	3	4	5
D. I like being a part of an important cause.	1	2	3	4	5
E. If ZPG achieves its goals, I will personally benefit from it.	1	2	3	4	5
F. The organization needs my contribution if it is going to achieve its goals.	1	2	3	4	5
G. I personally enjoy the people I associate with in the organization.	1	2	3	4	5
H. I enjoy my activities in the organization.	1	2	3	4	5
I. It's a group where I don't have to apologize for not having a big family, or not having had any children.	1	2	3	4	5
J. People who are important to me encourage my membership.	1	2	3	4	5
K. Stopping population growth is so important, that I try to support <u>any</u> effort aimed at that goal.	1	2	3	4	5
L. Other reason, please state _____	1	2	3	4	5

7. From the above list, select the one reason you feel is most important for your membership and the one reason you feel is the least important reason for your membership in ZPG. (Please indicate by writing in the corresponding letter A - L from the above list.)

A. The most important reason \_\_\_\_\_ B. The least important reason \_\_\_\_\_

8. What do you feel that you personally gain, if anything, from membership in ZPG?

A. From Local Chapter? (If no chapter, write None) \_\_\_\_\_

B. From National? \_\_\_\_\_

3.

9. Please circle the number which best represents your response to each statement.

	Strongly Agree	Tend to Agree	Neither Agree nor Dis- agree	Tend to Dis- agree	Strongly Disagree
A. ZPG chapters should get involved in local growth issues.	1	2	3	4	5
B. Parents with three or more natural children should be required to pay tuition if their children attend public schools.	1	2	3	4	5
C. The benefits of ZPG membership outweigh the costs.	1	2	3	4	5
D. I trust the leaders of ZPG to do something worthwhile with my dues.	1	2	3	4	5
E. I would not be a member of ZPG if my friends had not urged me.	1	2	3	4	5
F. A deep concern with population problems leaves no other alternative than active support of ZPG, Inc.	1	2	3	4	5
G. I have found ZPG meetings intellectually stimulating.	1	2	3	4	5
H. I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates.	1	2	3	4	5
I. I profit from the contacts I have made in ZPG.	1	2	3	4	5
J. The government should make an intensive effort to apprehend and deport all illegal aliens residing in this country.	1	2	3	4	5
K. I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals.	1	2	3	4	5
L. The number of persons in this local area who favor zero population growth is large.	1	2	3	4	5
M. Population education should be mandatory in the public schools.	1	2	3	4	5
N. I enjoy being a part of ZPG since many knowledgeable and influential people support it.	1	2	3	4	5
O. Being a member of ZPG keeps me well informed on population and related problems.	1	2	3	4	5
P. Zero population growth has now been accomplished in the United States.	1	2	3	4	5
Q. I would drop my membership in ZPG if I thought it would reach its goals without my support.	1	2	3	4	5
R. The number of persons in the U.S. who favor zero population growth is large.	1	2	3	4	5
S. I will "stick it out" with ZPG through thick and thin.	1	2	3	4	5
T. I may not renew my ZPG membership.	1	2	3	4	5
U. The number of foreign-born people entering this country to live should be reduced to equal the number of Americans leaving to live in other nations.	1	2	3	4	5

4.

10. Are you?            1. Male            2. Female
11. How many natural children (not adopted or stepchildren) do you now have? (fill in) \_\_\_\_\_
12. How many adopted children or stepchildren do you now have? (fill in) A. Adopted \_\_\_\_\_ B. Stepchildren \_\_\_\_\_
13. Your age? (fill in) \_\_\_\_\_
14. What is your current marital status?
1. Single (never married)    2. Married    3. Separated    4. Divorced    5. Widowed
15. Please check the highest educational level you have completed.
1. High school graduation or less \_\_\_\_\_.
2. Some college; or some business, professional, or technical schooling after high school but no Bachelor's Degree \_\_\_\_\_.
3. College graduation with a Bachelor's Degree \_\_\_\_\_.
4. Graduate work beyond the Bachelor's Degree but no advanced degree \_\_\_\_\_.
5. Graduate degree, please state highest degree obtained \_\_\_\_\_.
16. What has been your principal occupation in the last year? (circle only one)
0. Undergraduate student    1. Graduate Student    2. Houseperson    3. Unemployed
4. Farmer or farm laborer    5. Professional    6. Managerial
7. Clerical or sales worker    8. Blue-collar worker
17. Please circle the category which gives the total before-tax income in 1974 of yourself and (if you are married) your spouse. (response optional)
1. Under \$10,000    2. \$10,000-\$14,999    3. \$15,000-\$19,999    4. \$20,000-\$24,999
5. \$25,000-\$34,999    6. \$35,000-\$44,999    7. \$45,000-\$59,999    8. Over \$60,000
18. Are you a member of any other environmental or conservation organization? (If so, please state name(s); if not, write "none".)

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19. Please use this space or a separate sheet for any observations, comments or suggestions you have for or about ZPG.

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Thank you for your cooperation. Please look over the questionnaire to make sure you have not skipped any items. Please return the questionnaire in the enclosed envelope.

10. Are you? 1. Male (62.9) 2. Female (37.1)
11. How many natural children (not adopted or stepchildren) do you now have? (fill in)  $\bar{x} = 1.248$   
 0 = 47.6 1 = 11.8 2 = 18.5 3 = 14.1 4 = 6.5 5 or more = 1.6
12. How many adopted children or stepchildren do you now have? (fill in) A. Adopted B. Stepchildren  
 (see other sheet for 12 and for total number of children.  $\bar{x}$  of total children = 1.48)
13. Your age? (fill in) (see other sheet)
14. What is your current marital status?  
 1. Single (never married) [19.6] 2. Married [71.8] 3. Separated [2.1] 4. Divorced [2.4] 5. Widowed [2.1]
15. Please check the highest educational level you have completed.  
 1. High school graduation or less 2.6  
 2. Some college; or some business, professional, or technical schooling after high school but no Bachelor's Degree 14.2  
 3. College graduation with a Bachelor's Degree 20.7  
 4. Graduate work beyond the Bachelor's Degree but no advanced degree 17.0  
 5. Graduate degree, please state highest degree obtained (45.6-) Masters = 20.1 PhD = 16.3 MD = 6.2 Other Prof. = 3.0
16. What has been your principal occupation in the last year? (circle only one)  
 0. Undergraduate student (2.3) 1. Graduate student (5.4) 2. Houseperson (13.8) 3. Unemployed (4.0)  
 4. Retired (3.5) 5. Professional (57.3) 6. Managerial (9.3) 7. Clerical or sales worker (2.8) 8. Blue-collar worker (1.6)
17. Please circle the category which gives the total before-tax income in 1974 of yourself and (if you are married) your spouse. (response optional) [0.9%]  
 (used adjusted frequency)  
 1. Under \$10,000 (12.1) 2. \$10,000-\$14,999 (13.3) 3. \$15,000-\$19,999 (17.3) 4. \$20,000-\$24,999 (12.2)  $\bar{x}$  = slightly over \$25,000  
 5. \$25,000-\$34,999 (13.0) 6. \$35,000-\$44,999 (16.3) 7. \$45,000-\$59,999 (10.1) 8. Over \$60,000 (5.3)
18. Are you a member of any other environmental or conservation organization? (if so, please state name(s); if not, write "none".)  
 0 = 19.8 1 = 16.9 2 = 16.8 3 = 13.3 4 = 11.8 5 = 5.8 6 = 5.4 7 = 3.5 8 or more = 5.9  $\bar{x}$  = 2.782
19. Please use this space or a separate sheet for any observations, comments or suggestions you have for or about ZPG.  
 Comments given 52.1%

Thank you for your cooperation. Please look over the questionnaire to make sure you have not skipped any items. Please return the questionnaire in the enclosed envelope.

5. Do you presently hold office or have you ever held office in ZPG?

A. At present:	Local level:	1. Yes (2.0)	2. No	National level:	1. Yes (0.1)	2. No	Both	Neither
B. Formerly:	Local level:	1. Yes (8.0)	2. No	National level:	1. Yes (0.0)	2. No	0.3	97.7
							0.2	91.7

6. Why do you belong to ZPG? (Please circle the number which best expresses your response to each statement.)

Most Important Reason	Rank	Least Important Reason	Rank	adjusted frequency	A crucially important reason for my membership.	An important reason for my membership.	Of some importance for my membership.	Of very little importance to my membership.	Of absolutely no importance to my membership.	$\bar{x}$
34.5	2	-	-	A. My contribution is helping to influence action on population control.	62.7	30.2	5.9	1.2	0	1.46
2.1	-	-	-	B. I personally gain much from the information I receive from ZPG.	10.0	19.2	38.1	28.0	4.8	2.98
11.0	4	0.9	0.9	C. Some important aspects of my life are threatened by population growth.	41.2	22.7	24.6	5.9	5.5	2.12
0.6	6.4	5	5	D. I like being a part of an important cause.	6.2	18.1	25.1	26.6	24.0	3.44
0.7	4.4			E. If ZPG achieves its goals, I will personally benefit from it.	18.1	31.0	22.1	17.2	10.8	2.70
2.8	5	1.3		F. The organization needs my contribution if it is going to achieve its goals.	29.5	36.2	24.3	6.9	3.2	2.18
	12.2	4		G. I personally enjoy the people I associate with in the organization.	1.1	4.5	6.8	12.8	74.7	4.56
0.2	15.7	3		H. I enjoy my activities in the organization.	0.8	4.1	6.8	12.8	75.5	4.58
0.4	26.5	2		I. It's a group where I don't have to apologize for not having a big family, or not having had any children.	1.3	1.5	1.1	11.0	35.1	4.77
	31.3	1		J. People who are important to me encourage my membership.	2.0	1.0	2.6	8.7	85.7	4.75
37.1	1	1.6		K. Stopping population growth is so important that I try to support any effort aimed at that goal.	51.0	20.6	16.3	7.0	4.7	1.94
10.6	3			L. Other reason, please state _____	75.3	24.5	-	-	0.1	1.25

7. From the above list, select the one reason you feel is most important for your membership and the one reason you feel is the least important reason for your membership in ZPG. (Please indicate by writing in the corresponding letter A - L from the above list.)

A. The most important reason \_\_\_\_\_ B. The least important reason \_\_\_\_\_

8. What do you feel that you personally gain, if anything, from membership in ZPG?

A. From Local Chapter? (If no chapter, write None) \_\_\_\_\_

B. From National? \_\_\_\_\_

9. Please circle the number which best represents your response to each statement.

adjusted frequency	Strongly Agree	Tend to Agree	Neither Agree nor Disagree	Tend to Disagree	Strongly Disagree	$\bar{x}$
A. ZPG chapters should get involved in local growth issues.	49.0	42.7	5.0	3.2	0.0	1.63
B. Parents with three or more natural children should be required to pay tuition if their children attend public schools.	18.6	32.8	16.9	20.6	11.1	2.73
C. The benefits of ZPG membership outweigh the costs.	45.5	37.6	15.7	0.1	1.1	1.74
D. I trust the leaders of ZPG to do something worthwhile with my dues.	45.1	44.8	10.1	0.1	-	1.65
E. I would not be a member of ZPG if my friends had not urged me.	1.9	3.2	5.6	10.5	78.8	4.61
F. A deep concern with population problems leaves no other alternative than active support of ZPG, Inc.	47.5	28.0	11.7	8.7	4.1	1.94
G. I have found ZPG meetings intellectually stimulating.	6.5	9.1	65.9	5.0	13.4	3.10
H. I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates.	5.9	16.4	14.9	28.0	34.9	3.70
I. I profit from the contacts I have made in ZPG.	2.9	6.9	37.9	12.3	40.1	3.80
J. The government should make an intensive effort to apprehend and deport all illegal aliens residing in this country.	31.6	33.3	13.8	13.1	8.3	2.33
K. I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals.	3.7	21.7	30.8	27.9	15.9	3.31
L. The number of persons in this local area who favor zero population growth is large.	2.7	25.3	33.2	26.9	11.9	3.20
M. Population education should be mandatory in the public schools.	60.3	32.8	4.3	1.4	1.2	1.50
N. I enjoy being a part of ZPG since many knowledgeable and influential people support it.	2.1	8.6	37.5	12.7	34.7	3.74
O. Being a member of ZPG keeps me well informed on population and related problems.	30.5	55.8	9.0	3.4	1.4	1.89
P. Zero population growth has now been accomplished in the United States.	1.7	5.8	6.0	24.5	62.0	4.40
Q. I would drop my membership in ZPG if I thought it would reach its goals without my support.	4.7	11.8	15.7	36.5	31.4	3.78
R. The number of persons in the U.S. who favor zero population growth is large.	2.3	24.0	24.7	34.3	14.6	3.35
S. I will "stick it out" with ZPG through thick and thin.	23.3	43.7	25.3	4.2	3.6	2.21
T. I may not renew my ZPG membership.	0.9	3.7	4.5	41.5	49.3	4.35
U. The number of foreign-born people entering this country to live should be reduced to equal the number of Americans leaving to live in other nations.	20.2	22.0	26.7	20.0	11.1	2.80



## SURVEY OF ZPG MEMBERS, 1975

(% adjusted frequency unless noted otherwise)

Unless otherwise instructed, please circle the number which best represents your response to each question.

Example: Are you a ZPG member? 1. Yes 2. No

1. When did you originally join ZPG? 1. 1969 (ZPG founded) [14%] 2. 1970 (First Earth Day) [23.5%] 3. 1971 [17.4%]  
 4. 1972 (Stockholm Environment Conference) [7.3%] 5. 1973 [15.6] 6. 1974 (Bucharest Population Conference) [13.4%]  
 7. 1975 [8.8%] 9. No response  $\bar{x} = 3.62$
2. Is there a local ZPG chapter near you? 1. Yes [47.5% (48.2)] 2. No [18.7% (19.0)] 3. Don't Know [32.4% (32.8)] 9. No response [1.4%]  
 Relative frequency  
 Adjusted frequency in ( )  
 If either of these are marked, skip question 3 and continue with question number 4, please.
3. Do you belong to the local ZPG chapter? 1. Yes [26.1% (54.1)] 2. No [18.2% (37.8)] 3. Formerly, now dropped [3.4% (8.1)]  
 Relative frequency on all of  
 #3, in ( ), is adjusted frequency  
 and continue with question number 4, please.

## A. How often do you attend local ZPG meetings?

1. Frequently [2.4% (9.3)] 2. One or more times per year, but not frequently [2.1% (7.9)] 3. Not at all [21.6% (82.8)] No response [72.8% (-)]

## Adjusted frequency below this

## B. How many people do you think belong to your local chapter? (Fill in) [see other sheet]

## C. How many members usually attend the meetings you attend?

1. Less than 10 (8.2) 2. 10-20 (6.5) 3. 20-30 (1.6) 4. Over 30 (3.4) 5. I don't attend (81.5)

## D. To the best of your knowledge which of the following have been held by your local ZPG chapter in the last year, and which have you attended?

Check if Meetings Held	Check if you have attended meetings
(% checked)	(% checked)
71.1	14.9

## 1. Informational or program meetings (including those sponsored by ZPG and open to non-members).

2. Primarily social meetings such as picnics, dinners, etc. at which program is not primary

## 3. Business or program meetings open only to members

## 4. Committee or planning sessions.

## 5. Other, please state \_\_\_\_\_

## 4. Please circle your contributions to and activities in ZPG.

- A. Dues: 1. Local chapter (2.3) 2. National (65.3)

- B. Attend meetings: 1. Local chapter (4.0) 2. National (1.0)

- C. Write letters or send other information in behalf of ZPG and/or its policies. 1. Local or state issues (3.9) 2. National (12.9)

- D. Give speeches, serve on panel discussions, attend hearings, etc. 1. Local or state issues (2.2) 2. National (3.8)

- E. Work for candidates, referenda, favorable to ZPG policies. 1. Local or state (4.6) 2. National (4.1)

- F. Make monetary or material resource contributions in addition to dues. 1. Local ZPG (7.2) 2. National (20.0) 7.6

## APPENDIX B

QUESTIONNAIRE, LETTERS, RAW RESULTS

Weighted Frequencies Additional to Questionnaire

V1	Categories	<u>Frequencies</u>			Code
		Absolute	% (adjusted)		
	Leader - small	3	0.9	$\bar{x} = 5.921$ median 6.14 mode 7	1
	- medium	3	0.9		2
	- large	3	0.9		3
	Member - small	29	9.1		4
	- medium	53	16.5		5
	- large	109	33.9		6
	Not affiliated	122	37.7		7
	Total	323	100.0		

V6 Number of members in local chapter

	% (adjusted)	
10-19	1.3	
20-29	7.4	
30-39	9.7	$\bar{x} = 5.96$
40-54	7.3	
55-150	23.9	
151 and up	50.4	

V63 Number of adopted children

0 = 92.6      1 = 3.9      2 = 2.7      3 or more = 0.8

V64 Number of stepchildren

0 = 94.8      1 = 0.6      2 = 3.4      3 or more = 1.2

V65 Total number of children including natural, adopted and stepchildren

0 = 41.8	4 = 7.4	$\bar{x} = 1.483$
1 = 11.5	5 = 3.5	
2 = 19.7	6 = 0.4	
3 = 15.4	7 or more = 0.2	

## V66 Age

% (adjusted)

19 or less	0.0
20-24	4.2
25-29	17.7
30-34	15.6
35-39	14.8
40-49	20.4
50-59	16.4
60 or over	11.0

 $\bar{x}$  = 40-49 range

## V74 Membership type

%

Student	10.6
Regular	64.7
Family	15.2
Participating	5.8
Donor	1.6
Contributing	1.3
Sustaining	0.8
Life	0.2

ZERO  
POPULATION 1346 Connecticut Avenue N.W. Washington, D.C. 20036  
GROWTH (202) 785-0100

September 25, 1974

Harriet E. Tillock  
2541 N. Mason Street  
Saginaw, Michigan 48602

Dear Ms. Tillock:

ZPG is happy to grant you permission to study the organization, and survey its membership, as part of your Ph.D. thesis research. I am certain that your work will be of substantial benefit to us.

Our grant of permission, however, is subject to the following requirements:

--that you make clear in all phases of the project that this study is being conducted solely by you in your capacity at Michigan State University, and that it is not an official activity of Zero Population Growth.

--that the final version of the questionnaire to be sent to our members be approved by us.

--that you provide to ZPG for review advance copies of any final report or other materials which constitute project findings or conclusions.

Enclosed are initial suggestions for revision of Larry Barnett's second questionnaire. We offer them only as suggestions--as questions which we believe will produce answers which are either more meaningful to you, or useful to you and to ZPG. We do not intend these suggestions to limit you in any way in developing your survey material.

Sincerely,

Robert T. Dennis  
Executive Director

cc: John Harris  
John Tanton

Enclosures  
RTD:em

## MICHIGAN STATE UNIVERSITY

Department of Sociology

East Lansing, Michigan . 48824

We are conducting a study of the members of Zero Population Growth Inc. You are one of a small but representative sample of the members selected by chance for this study. Since the sample is small, *your response is important* so that we may get a true picture of ZPG membership. Our aim is to learn about the way you are involved in ZPG, the reasons for your membership, and your views on some important population policy issues. It is hoped that this study will help ZPG become a more effective organization.

The study is being conducted with the permission and the cooperation of the national headquarters of ZPG, but is an independent study. The study is made possible through the support of Michigan State University and through the personal resources of the investigators; no financial support is provided by ZPG.

We hope you will take a few minutes right now to fill in and return the enclosed questionnaire. Your answers will be handled with the strictest confidentiality. No names or other identifying features of respondents will be revealed in reports of the study. Although statistical analysis of the results will be made available to ZPG, questionnaires and names of respondents will not be provided. This procedure is designed to allow you to answer freely and candidly. It is only if you are completely frank and open in your answers that the study will be useful.

Your name and address are coded to the questionnaire identification number so we can maintain our records. We plan to mail you a reminder if we don't receive a response in about two weeks. Please keep in mind that it is important for us to study all types of members: long-term and short-term, deeply involved and less involved, enthusiastic and less-than-enthusiastic. However, we wish to respect completely your right to privacy and will send you neither a reminder nor another questionnaire if you indicate your desire not to participate on this letter and return it in the envelope enclosed. If you desire a copy of our results, check below and return this with your questionnaire.

We appreciate greatly your cooperation in making this study possible.

Sincerely,

Denton E. Morrison  
Professor  
Principal Investigator

Harriet Tillock  
Project Coordinator  
Instructor, Saginaw Valley College  
Ph.D. Candidate, MSU

\_\_\_\_\_ I would like a copy of the results of this study.

MICHIGAN STATE UNIVERSITY

Department of Sociology

East Lansing, Michigan . 48824

October 6, 1975

Mr. \_\_\_\_\_  
P.O. Box 111  
Waterloo, NY 13165

Dear Mr. \_\_\_\_\_:

We hope you received our first letter and questionnaire explaining the study of ZPG members we are conducting. In case you didn't, or in case you misplaced it or set it aside, we're enclosing a copy.

We are very pleased with the cooperation from ZPG members we have received in our study, but, as indicated in our original letter, we do need the cooperation of all persons sampled if our results are to be representative of ZPG members. Naturally we recognize that ZPG members are very busy people and that our questionnaire probably can't have high priority in your time schedule. But we would really appreciate it if you could find a few minutes to fill in and return the questionnaire.

Thanks,

Denton E. Morrison  
Professor  
Principal Investigator

Harriet Tillock  
Project Coordinator  
Instructor, Saginaw Valley College  
Ph.D. Candidate, MSU

P.S. If you have already returned the questionnaire, please disregard this letter!

**APPENDIX C**  
**DETAILED TABLES**



TABLE C.1  
"WHAT DO YOU PERSONALLY GAIN FROM MEMBERSHIP IN ZPG?"

TYPE OF GOOD OR INCENTIVE	SPECIFIC VARIABLE	TOTAL SAMPLE	(N)		(N)		(N)		(N)		(N)		RATIO SUPPORT TOTAL
			(102) CONSISTENT BFLIF SUPPORT ZPG IS	(51) CONSISTENT ZPG IS	(53) BELIEVE CHAPTER SIZE <55	(42) CHAPTER SIZE >150	(164) MEMBER LOCAL CHAPTER	(159) NOT MEMBER CHAPTER	Small	Large	Small	Large	
Private	I personally gain much from the information I receive from ZPG.	42.4	43.1	47.1	4.0	49.1	47.6	1.5	47.0	37.7	9.3	1/3	33.3
Public	My contribution is helping to influence action on population control.	38.1	39.2	37.3	1.9	37.7	47.6	9.9	42.1	34.0	8.1	2/3	66.6
Private	I enjoy my activities in the organization.	19.8	21.6	19.6	2.0	37.7	33.3	4.4	31.7	7.5	24.2	0/3	0.0
Public	Stopping population growth is so important that I try to support any effort aimed at that goal.	19.2	22.5	17.6	4.9	22.6	19.0	3.6	19.5	18.9	0.6	3/3	100.0
Private	I like being a part of an impor- tant cause.	15.5	17.6	11.8	5.8	5.7	9.5	3.8	9.8	21.4	11.6	2/3	66.6
Private	I personally enjoy the people I associate with in the organization.	8.7	10.8	9.8	1.0	15.1	21.4	6.3	14.0	3.1	10.9	1/3	33.3
Public	Some important aspects of my life are threatened by population growth.	4.0	5.9	7.8	1.9	3.8	4.8	1.0	4.3	3.8	0.5	1/3	33.3
Other Private	- does not fit other private categories	4.3	3.9	3.9	0.0	7.5	2.4	5.1	4.3	4.4	0.1	1/3	33.3
Other Public	- does not fit other public categories	2.5	-	2.0	2.0	1.9	2.4	0.5	1.8	3.1	1.3	0/3	0.0
Public	The organization needs my contri- bution if it is going to achieve its goals.	1.9	2.0	2.0	0.0	5.7	4.8	0.9	3.7	-	3.7	2/3	66.6
Public	If ZPG achieves its goals, I will personally benefit from it.	0.9	1.0	2.0	1.0	1.9	-	1.9	0.6	1.3	0.7	1/3	33.3
PUBLIC GOOD SUPPORT			2/6 (33.3%)		3/6 (50%)		3/6 (50%)						
TOTAL TESTS													
PRIVATE GOODS SUPPORT			1/5 (20%)		2/5 (40%)		2/5 (40%)						
TOTAL TESTS													
TOTAL SUPPORT			3/11 (27.3%)		5/11 (45.5%)		5/11 (45.5%)						42.4
TOTAL TESTS													
MEAN DIFFERENCE SUPPORT			3.60		3.30		4.10						
MEAN DIFFERENCE NOT SUPPORT			1.96		3.73		9.28						

TABLE C.2  
DETAILED\*

PUBLIC GOODS INCENTIVES (CLOSED RESPONSES)	(N)		(N)		(N)		(N)		(N)		(N)		RATIO SUPPORT TOTAL TESTS	(%)
	(102)	(51)	(53)	(42)	(164)	(159)	(94)	(249)	(94)	(249)	(94)	(249)		
	CONSISTENT BELIEF SUPPORT ZPG IS	Large	Small	BELIEVE CHAPTER SIZE <55	Large	Small	MEMBER LOCAL CHAPTER	NOT MEMBER CHAPTER	HOLD OFFICE/ NOT HOLD OFFICE	Small	Large	DIFF.	DIFF.	TESTS
Some important aspects of my life are threatened by population growth.	3.21	3.10	.11	3.12	3.10	.02	3.01	2.99	.02	3.00	3.00	none	3/4	75
If ZPG achieves its goals, I will personally benefit from it.	2.50	2.57	.07	2.42	2.71	.29	2.52	2.38	.14	2.45	2.45	none	1/4	25
I would not belong to ZPG if I did not stand to benefit personally from a reduction in growth rates.	1.33	1.50	.17	1.37	1.50	.13	1.48	1.25	.23	1.26	1.40	.15	1/4	25
Stopping population growth is so important that I try to support any effort aimed at that goal.	3.13	2.88	.25	3.02	2.76	.26	3.02	3.09	.07	3.01	3.06	.05	2/4	50
The benefits of ZPG membership outweigh the costs.	3.27	3.41	.14	3.36	3.48	.12	3.43	3.18	.25	3.43	3.27	.16	3/4	75
A deep concern with population problems leaves no other alternative than active support of ZPG, Inc.	3.21	3.14	.07	2.96	3.24	.28	3.23	3.07	.16	3.30	3.10	.20	2/4	50
The organization needs my contribution if it is going to achieve its goals.	2.79	2.69	.10	2.74	2.66	.10	2.70	2.86	.16	2.65	2.82	.17	2/4	50
I would drop my membership in ZPG if I thought it would reach its goals without my support.	1.05	1.28	.23	1.02	0.91	.11	1.03	1.29	.26	1.00	1.20	.20	1/4	25
My contribution is helping to influence action on population control.	3.47	3.65	.18	3.40	3.63	.23	3.53	3.48	.05	3.41	3.53	.11	1/4	25
	$\bar{x}$	supp.	0.15			12.3			0.142			0.180		
	$\bar{x}$	not supp.	0.144			.21			0.163			.097	2/9	
RATIO SUPPORT TOTAL TESTS	4/9 (44.4)			4/9 (44.4)			6/9 (66.7)			2/9 (22.2)			16/36 (44.4)	

TABLE C.2 (continued)

PRIVATE GOODS INCENTIVES	(M)		(N)		(M)		(N)		(M)		(N)		RATIO SUPPORT TOTAL
	(102) CONSISTENT BELIEF SUPPORT ZPG IS	(51) Small	(53) BELIEVE CHAPTER SIZE <55	(42) Large	(164) MEMBER LOCAL CHAPTER	(159) NOT MEMBER CHAPTER	(94) HOLD OFFICE/ NOT HOLD OFFICE	(249) Large	(164) MEMBER LOCAL CHAPTER	(159) NOT MEMBER CHAPTER	(94) HOLD OFFICE/ NOT HOLD OFFICE	(249) Large	
	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	DIFF. TESTS (4)
Being a member of ZPG keeps me well informed on population and related problems.	3.18	3.27	.09	3.29	3.40	.11	3.32	3.06	.27	3.37	3.14	.23	2/4
I personally gain much from the information I receive from ZPG.	2.08	2.32	.24	2.25	2.22	.03	2.20	2.05	.15	2.33	2.06	.27	1/4
I personally enjoy the people I associate with in the organization.	1.12	1.35	.23	1.61	1.73	.12	1.61	0.48	1.13	2.04	0.76	1.28	2/4
It's a group where I don't have to apologize for not having a big family, or not having had any children.	0.44	0.36	.08	0.39	0.71	.32	0.48	0.31	.17	0.46	0.38	.08	1/4
I have found ZPG meetings intellectually stimulating.	2.33	2.61	.28	2.04	2.83	.79	2.59	1.90	.69	2.77	2.11	.66	2/4
I would get a lot out of being a ZPG member, even if ZPG doesn't accomplish its goals.	2.03	1.58	.45	1.96	1.95	.01	1.89	1.74	.15	2.04	1.75	.29	0/4
I like being a part of an important cause.	1.84	1.61	.23	1.88	1.82	.06	1.79	1.62	.18	1.90	1.64	.26	0/4
I profit from the contacts I have made in ZPG.	1.58	1.88	.30	2.04	2.17	.13	1.94	1.22	.72	2.14	1.43	.71	2/4
I enjoy my activities in the organization.	0.97	1.26	.29	1.51	1.69	.18	1.49	0.47	1.01	1.96	0.69	1.27	2/4
I enjoy being a part of ZPG since many knowledgeable and influential people support it.	1.31	1.48	.17	1.64	1.56	.08	1.59	1.33	.26	1.73	1.38	.35	1/4
	$\bar{x}$ diff. supp.	.229		.275				- 0/10		- 0/10			- 0/10
	$\bar{x}$ diff. not supp.	.253		.045				.473		.54			.54
RATIO SUPPORT TOTAL TESTS (4)													
	7/10 (70)		6/10 (60)		0/10 (0)		0/10 (0)		0/10 (0)		13/40		(32.5)
SOCIAL PRESSURE INCENTIVES (CLOSED RESPONSES)													
I would not be a member of ZPG if my friends had not urged me.	0.38	0.29	.09	0.57	0.27	.30	0.37	0.46	.09	0.27	0.46	.19	2/4
People who are important to me encourage my membership.	0.44	0.22	.22	0.65	0.46	.19	0.52	0.29	.23	0.45	0.40	.05	4/4
	Mean diff. supp.	.155		.245				$\bar{x}$ diff. supp.	.23			.05	
								$\bar{x}$ diff. not supp.	.09			.19	
	2/2 (100)		2/2 (100)		1/2 (50)		1/2 (50)		1/2 (50)		6/8		(75)
RATIO SUPPORT TOTAL TESTS (4)													
	13/21		12/21		7/21		3/21		35/84				
TOTAL RATIO SUPPORT TOTAL TESTS													
% SUPPORT	61.9		57.1		33.3		14.3		41.7				
$\bar{x}$ diff. tests which support	.120		.219		.154		.137		.162				
$\bar{x}$ diff. tests which do not support	.185		.137		.379		.548		.29				
													$\bar{x}$ all support
													$\bar{x}$ all not support

\* Includes only closed responses, so the totals do not tally with test Table C.1.

TABLE C.3  
DETAILED

	CONSISTENTLY BELIEVE SUPPORT ZPG IS			BELIEVE CHAPTER SIZE		MEMBER CHAPTER / MEMBER		LEADER / LEADER		NOT SUPPORT TOTAL		TESTS (%)		
	Small	Large	DIFF.	<55	>150	Small	Large	Small	Large	Small	Large			
Public Good Personal Utility	66.47	68.17	1.90	66.54	68.89	2.35	66.85	63.64	3.21	64.96	65.41	.45	1/4	25
Public Good General Utility	83.82	83.01	.81	82.39	82.78	.39	84.45	82.03	2.42	84.86	82.76	2.20	3/4	75
Public Good Contingency Efficacy	58.63	60.20	1.57	58.68	55.95	2.73	57.85	61.55	3.70	57.03	60.45	3.42	1/4	25
Public Good Contributory Efficacy	89.40	94.94	3.54	88.08	92.68	4.60	90.49	89.54	.95	88.38	90.54	2.16	1/4	25
Overall Public Good Utility	75.25	75.63	.38	74.47	75.71	1.24	75.59	73.36	2.23	74.95	74.37	.58	2/4	50
Overall Public Good Efficacy	68.82	71.11	2.29	68.49	68.25	.24	68.96	70.98	2.02	67.52	70.68	3.16	1/4	25
Public Good Total	73.05	75.10	1.05	72.46	73.12	.66	73.34	72.70	.64	72.42	73.21	.79	1/4	25
Private Good Information	72.77	76.28	3.51	75.39	76.43	1.04	75.40	71.10	4.30	76.76	72.26	none	2/4	50
Private Good Interaction	35.56	37.84	2.28	40.67	44.39	3.72	41.19	27.70	13.49	45.00	31.45	13.55	2/4	50
Private Good Other	53.42	55.54	2.12	59.47	60.12	.65	57.83	47.82	10.01	61.80	50.31	11.49	2/4	50
Private Good Total	53.10	56.14	3.04	59.23	60.41	1.18	58.18	49.10	9.08	61.38	51.45	9.93	2/4	50
Social Pressure	28.53	25.10	3.43	31.89	27.86	4.03	29.09	27.79	1.30	27.57	28.73	1.16	3/4	75
Total Number of Confirmations	6			7			6				2		21	
Total Number of Tests	12			12			12				12		48	
Percent Confirmed	50%			58.3%			50%				16.6%			
Mean Difference Support			2.73			1.94				1.79			1.39	
Mean Difference Not Support			1.79			1.85				7.10			4.61	

TABLE C.4  
TABLE SUMMARY

TESTS	CONSISTENTLY BELIEVE SUPPORT FOR ZPG IS SMALL/LARGE RATIO SUPPORT/TESTS (%)	BELIEVE CHAPTER SIZE IS LESS THAN 50-OVER 150 RATIO SUPPORT/ TESTS (%)	MEMBER LOCAL CHAPTER/NOT MEMBER RATIO SUPPORT/ TESTS (%)	PRESENTLY HOLD OFFICE/NOT HOLD OFFICE RATIO SUPPORT/ TESTS (%)	ROWS SUMMARY RATIO NUMBER SUPPORT TO NUMBER TESTS (%)
<u>Public Goods</u>					
Individual Items (Closed) (Table 5.5)	4/9 44.4	4/9 44.4	6/9 66.6	2/9 22.2	16/36 44.4
Individual Items (Open-Ended) (Table 5.3 Expanded)	2/6 33.3	3/6 50.0	4/6 66.6	-	9/18 50.0
Summary Open-Ended (Table 5.4)	0/1 0	0/1 0	1/1 100.0	-	1/3 33.3
Refined Indices (Table 5.6)	1/7 14.3	2/7 23.6	5/7 71.4	2/7 28.6	10/28 35.7
Gain (Public Goods/Contributions)	1/1 100.0	1/1 100.0	0/1 0	0/1 0	2/4 50.0
Ratio (Public Goods/Private Goods)	1/1 100.0	1/1 100.0	0.1 0	0/1 0	2/4 50.0
Summary Support/Total Tests	9/25 36.0	11/25 44.0	16/25 64.0	4/18 22.2	40/93 43.0
<u>Private Goods</u>					
Individual Items (Closed) (Table 5.5)	7/10 70.0	6/10 60.0	0/10 0	0/10 0	13/40 32.5
Individual Items (Open-Ended) (Table 5.3 Expanded)	1/5 20.0	2/5 40.0	2/5 40.0	-	5/15 33.3
Summary Open-Ended (Table 5.4)	0/1 0	1/1 100.0	0/1 0	-	1/3 33.3
Refined Indices (Table 5.6)	4/4 100.0	4/4 100.0	0/4 0	0/4 0	8/16 50.0
Summary Support/Total Tests	12/20 60.0	13/20 65.0	2/20 10.0	0/14 0	27/74 36.5
<u>Social Pressure</u>					
Individual Items (Table 5.5)	2/2 100.0	2/2 100.0	1/2 50.0	1/2 50.0	6/8 75.0
Refined Indices (Table 5.6)	1/1 100.0	1/1 100.0	1/1 100.0	0/1 0	3/4 75.0
Summary Support/Total Tests	3/3 100.0	3/3 100.0	2/3 66.6	1/3 33.3	9/12 75.0
Total Summary All Tests Support/Total Tests	24/48 50.0	27/48 56.3	20/48 41.6	5/35 14.3	76/179 42.5

**APPENDIX D**  
**RESPONSES TO OPEN-ENDED QUESTIONS**

## RESPONSES TO OPEN-ENDED QUESTIONS

A sense of contributing to population stabilization awareness. The lobbying efforts on population stabilization and related topics. (A)

Same. Same. (A)

Help influence attitudes, policies, legislation on population control. Ditto. (A)

Help to educate public and influence legislation. Same. (A)

None. Representation in the lobbies of congress. (A)

I hope that the activities of the organization are having an impact on population growth. Ditto. (A)

ZPG membership provides greater political and educational leverage for my views. Same as above. (A)

A sense that something is being accomplished to stop population growth. Same. (A)

A chance to influence local population activities. A chance to influence national population activities. (A)

It's better than doing nothing (and sometimes it's even a tool for doing *something*). (A)

A contribution to input on vital issues of population growth, land and resource use. A voice in government on the important population issues of today, and also in the news media. (A)

Hope that I've done a part in preserving the world for animals (plants) besides man. (A)

Supporting a vitally important cause. (A)

The chance of influencing population growth. Same. (A)

Knowing I am helping by making a worthwhile, significant contribution to life. Same. (A)

None. Assisting in a financial way to reach ZPG goals. (A)

Information and support in activities designed to influence decision-making regarding population growth. (A,B)

Support local candidates favorable to ZPG policies. Resource materials for speeches, up-to-date population statistics. (A,B)

N/A I hope to actively participate in the future in local groups. Related to 6A and 6B above. (A,B)

An opportunity to work for ZPG goals. Information - I feel that ZPG's lobbying and information service are vital on a national level. (A,B)

Vehicle for informing others about problems of over population. Information concerning population policies of government officials. (A,B)

News to use in political action - wish to support Albany Lobbyist Program. Same - excellent newsletter from Washington. (A,B)

None. 1. Lobbying. 2. Legislative analysis. 3. Information - Data - News. (A,B)

Newsletter - Information to keep me in touch with what progress is being made toward population control. Same as above - With information on current legislation on population control and its outcome. Aids one in determining for whom I will vote when I can see how my representatives have voted on population issues. (B,A)

None. Facts for my local rukus on this issue. (B,A)

Information on local ecology and population issues. Information on national issues, legislation, where letters, etc., would be most helpful. (B,A)

Gives me local information on important events. Information source and action alert for national issues. (B,A)

None. Keeping well informed of the issues and data involved to become a better conversationalist on the subjects and to take timely action concerning current legislation. (B,A)

Knowledge of population problems with occasional information for personally confronting a problem area. (B,A)

None. Information regarding population problems. How to affect legislation. (B,A)

None. Information on what is going on nationally regarding population control. Opportunity to influence favorable legislation. (B,A)

None. Information, means of expression of my views in politically effective way. (B,A)



Some knowledge as to population trends but more important what is currently happening and if a letter from me might help. (B,A)

Information for local people who may not be aware of the need to curb population growth. A sense of contributing to population control. (B,A)

A compilation of local sterilization clinics, adoption agencies, and sex education services. From media target lists, a chance to change national attitudes in advertising. (B,A)

Very little now, question the need for local chapters - very hard to get volunteers. Much crucial information - also correspondence group helpful and targets in congress to write to. (B,A)

Satisfaction that efforts are being made to control population. Information regarding population problems. (A,B,D)

A feeling of having helped this very important cause. Information and knowledge gained from annual national meeting. (A,D,B)

Increased awareness of need for population control. Same. (B,D,A)

None. A truer understanding of the problem and person satisfaction in helping, what I feel, is a very worthy cause. (B,D,A)

We are able to put on a program or provide a school speaker much easier. National Reporter Magazine. (A,B,H)

A chance to participate at some level and influence some people. Good publications and information. (A,H,B)

The experience of grass roots involvement in the quality of life movement. Information on population growth and quality of life politics. (A,D,B)

I gained the feeling that at least I am trying - just wish it was more effective. Mostly in information on the latest events regarding population - both politically and demographically. (A,B,K)

None. A feeling that I am supporting a cause which potentially could prevent the world from choking itself to death. In discussing population issues with people, the information made available to me through ZPG publications is useful and, of course, supportive. (A,B,K)

Local newsletter info, influence on people by calling attention to growth control. Info same: may keep human race from extinction or at least in the future. (B,A,K)

None. Since there is no local chapter, I gain much information and emotional support from my national membership. I sometimes feel like a one-woman ZPG chapter here since the information I gain from

ZPG and the National Reporter I pass on to organizations and the community in my population lectures, and to the Board of Directors of our Planned Parenthood group. My major personal gain: since I feel so strongly about the human over population problem in the world today, I feel that ZPG is working hard in the direction of population control and concern for the environment, especially in efforts to influence population legislation. (B,A,K)

None. Information and 1 more added to ranks of ZPG and its goals. (B,K,A)

Helping educate for population control. Cutting down population growth to improve the quality of our lives. (A,C)

A chance to contribute to my quality of life. Good written information. (A,C,D)

Ability to influence local issues directly affecting me. Knowledge of progress to change population growth and policies affecting population growth. (A,C,B)

The knowledge that I'm helping, even if in only a small way. The wider the supporting membership the more effective the lobbying. (A,D)

Not a member. A sense of working with others to help control population. (A,D)

None. Satisfaction that I am doing something for the cause. (A,D)

None. Satisfaction that I am helping advance a cause I have too little time to advance alone. (A,D)

None. Satisfaction in contribution to "doing something." (A,D)

Nothing. The feeling that I'm at least doing something (as opposed to nothing) to advance a cause that I personally believe in. (A,D)

A feeling of participating at least in a minor way, in an attempt to solve a most serious problem. (A,D)

None. Feeling that my contribution has helped. (A,D)

None. The feeling that I am doing something to help our earth. (A,D)

A feeling of helping to improve the future of the world. (A,D)

None. Satisfaction that I am doing something about the population problem - more than talking, which is the most effective thing we can do. (A,D)

The inner satisfaction (knowledge) that I am doing something towards population control. (A,D)

None. A feeling of encouragement which counters recurrent permission - due to the past success of ZPG in helping to bring about greater awareness of the problematic nature of over population growth in the U.S. and abroad. ZPG seems to be making headway, as viewed in changing attitudes about family size, birth control, etc.: I like to think that, as a member, I helped in prompting some of those changed attitudes. (D,A)

I personally gain nothing but I feel good encouraging a good cause. (D,A)

Sense of satisfaction in knowledge I am helping. Ditto. (D,A)

None. A feeling of contributing to what I consider to be a very important goal. (D,A)

Certain satisfaction of feeling I am doing a little at least for cause I favor. (D,A)

Only that I do my tiny part for an important cause. (D,A)

Pleasure at being able to support worthwhile educational, lobbying, etc., activities.

A sense of satisfaction that I'm doing some small part to help future generations, but frankly, I don't care much about the satisfaction: What I care about is helping future generations. (A,D,K)

I don't participate in the local chapter. I personally gain some satisfaction that I'm helping to support something extremely important. (A,K,D)

I have never attended a meeting, but feel they need my financial assistance. Being part of a movement that will help not only our country but the world. (A,K,D)

Nothing personal - but it helps ZPG keep going, I think (hope?). Same with the addition that I suppose it's nice to have on my resume (on the other hand, it could be detrimental, too - so I guess that's not important). (A,F,H)

None. Knowledge and satisfaction that the effects of ZPG organization goals are being accepted and acted upon by other organization and government from local to federal. (A,H)

Simply, opportunity to do what I can. Chance to *maybe* help and some solace from knowledge that others know what I know (yes, I do feel I know certain things - frightening things - which so many apparently don't yet realize). (A,H)

Personal satisfaction that I am making some contributions. (A,H)

Satisfaction of knowing I'm contributing to population control effort. Same as A. (A,H)

Contributing to overall env. effort by chapter support. Florida is most rapidly growing state. Satisfaction of seeing bad env. candidates lose elections and laws passed thru lobbying efforts of National ZPG. (A,H)

Practice working publically on an issue I believe in. (A,H)

Satisfaction that I am doing something to stop population growth. Same as above. (H,A)

Feeling of satisfaction that I am contributing to the "cause." In addition to above a feeling that I'm helping to influence politics on national level. (H,A)

None. Satisfaction of making a small but helpful monetary contribution to something I believe in. (H,A)

None. Personal satisfaction that I am at least trying to influence and limit population growth. (H,A)

None. It gives me personal satisfaction to practice and work for what I preach. (H,A)

Help the work that local chapter performs. Read Newsletter. (A,H,B)

Information of some sense of achievement. Information of some sense of achievement. (A,B,H)

Support, personal satisfaction, at having an impact on what I perceive to be our most threatening problem. Ditto. (A,H,K)

Former chapter - through my speaking activities I was satisfied in arousing people. A sense of working toward important social and environmental goals. (A,H,K)

The satisfaction of knowing that I am making a contribution toward solving a major social problem. Same as A. (A,H,K)

Satisfaction from working with local officials and citizens on growth issues to preserve and improve quality of life of our community. Satisfaction from helping to solve the number 1 problem facing our nation and world. (A,H,K)

The ability to become personally involved in the issues of over-population. Knowledge that a concerned effort is being made to educate people as to the problems of over-population. (A,H,K)

Satisfaction of helping curb practices which block assets to family planning so each family can voluntarily limit its size. Support of knowing others are working towards the same goal, so I am not alone. (D,A,K)

Knowledge that I am helping the number 1 cause of today's social and economic problems. Ditto. (A,H,K)

The feeling that my membership is of some value to others and helps further the goal of ZPG. (A,H,K)

Feeling of devoting time, energy and money to a critically important cause. Feeling of belonging to a well-organized, dedicated group. (A,K,H)

A vehicle to use in alerting others of our concern. A local that identifies us when we lobby. (A,K)

Working with local community leaders and seeing individual persons benefiting from activities. Successful lobbying to develop more efficient family planning and population/environmental legislation. Educational efforts to introduce members of congress to the impact of not providing and permitting needed services to American population on a voluntary basis. (A,K)

I help support one of the most critical issues facing world today. (A,K)

I'm helping to support an organization, that is trying, to make people aware of a serious problem - that of unchecked population growth, and that of encroaching urbanization! (A,K, other public)

None. Fighting over-population is too great a task for any one individual. Only an organization like ZPG, speaking for many individuals can expect to be heard. (A,K)

Knowledge that I am participating in effort to limit evils due to over-population - the best way to fight cause of war, disease, poverty, or rather to able some possibility of success in limitation of these afflictions of humanity. (A,K)

Newsletter revelations of the efforts to suppress family planning information! The same as A on a national level!! (B)

I receive local chapter newsletter which keeps me informed of local population issues. The National Reporter keeps me politically aware of national politics and legislation concerning population control. (B)

Not member. Information from publications. (B)

None. I get to read the publications. (B)

Some information newsletter; I have occasionally borrowed films from ZPG for teaching; attending workshops for teachers on population and environment. Publication "National Reporter", information. (B, other private)

Information. Information. (B)

Nothing. Information. (B)

None. Insight into efforts to control human population. (B)

Information. Information. (B)

Local chapter has had very poor leadership for several years. Nothing gained. Some info world population and what is being done. (B)

Personal gain?? It has been a lot of work at substantial personal expense! Some mailings are helpful. (B)

None. Information. (B)

Chapter inactive. Not very much. Newsletters are not timely for most legislative issues. I get more from NARAL and PPFA. (B)

No time for it. Read literature. Ditto. (B)

None. Better knowledge of world population situation. (B)

None. Information. (B)

Local chapter not now active. Information on population trends, politics, etc. (B)

None. Information not otherwise available to me. (B)

Detailed facts and information on population issues. (B)

None. An interesting newsletter. (B)

Direction. (B)

None now. Good information, which unfortunately, I no longer have time to read because of full time involvement in opposition to the local and national madness of nuclear power. (B)

Insight into the mentality of local politics, esp. local land use. Interesting and well-put together information. (B, other private)

Information. (B)

None. Information. (B)

Knowledge of key legislation, news - (trends, etc.) helps in teaching about population. I've used some info in a book also. (B, other private)

None? Information from the publication. (B)

Information as to progress and need. Accurate data for discussions. (B)

Information about pressures from special interests. (B)

None. Information. (B)

None. Valuable support (population data, propaganda, material, etc.) for my teaching activities. (B, other private)

Enjoy the bulletin. (B)

None. Information. (B)

Report of national and world events of population growth control and national resources. Same as above. (B)

Do not attend. Factual information for discussions with friends. (B)

None. Current information. (B)

None. Regular information on ZPG developments, achievements, etc. (B)

Do not know. Up-to-date information. (B)

Information. (B)

None. Newsletter information. (B)

None. Up-to-date information on family planning, abortion, population, immigration - facts and legislation. (B)

Not actively associated. I'm kept up-to-date on legislation and national issues. (B)

None that I know of. Information. (B)

Information which is personally and professionally useful. (B)

None. My local paper has little about ZPG goals. I want to be informed. (B)

Chapter presently not meeting. Find National Reporter educational. Also like to be informed on attending legislation. (B)

None. Information on population and population control problems. (B)

None. Newsletter and information. (B)

None. Information and some encouragement. (B, other private)

Nothing. Current information. (B)

Information about pertinent state legislation. Information about pertinent national legislation. (B)

Knowledge of local issues. I enjoy reading the publications and use much of the material in my high school classroom. (B, other private)

None. Information and knowledge; feedback concerning political leaders in reference to population issues. (B, other public)

Nothing. Information, lobbyist but little. (B)

First-hand knowledge; brief glimpses into decision-making. Impact on continued U.S. growth, current information on population topics. (B)

Newsletter. (B)

Information about local concerns. Information, renewed dedication. (B,D)

ZPG reporter sporadically interesting. See D above. (B,D)

None. Educational materials and somebody to support. (B,D)

Satisfaction in helping the cause. Awareness of population problems, progress and strategy. (D,B)

Information on an important effort. Information. (D,B)

A sense of working for a worthy cause. Not much; but newsletter releases are good. (D,B)

Chapter inactive. Information on population. Feeling of making a contribution to solving population problems. (B,F)

Very little personal gain - in fact it is more a burden locally as the current chapter president! Mostly the newsletters as a source of information. (B,F,H)

Experience. Knowledge. (B,H)

Information regarding local action. Activism on important level. (B,H)

Personal benefits from earth day activities and local speakers Literature. (H,B)



Good vibes for work done. Information, hope, encouragement statistics. (H,B)

I don't feel I gained anything from the local chapter except experience organizing programs, etc. Information and awareness. (H,B)

Personal involvement (when I was working in one). Information. (H,B)

Hope, encouragement. Information. (H,B)

None. Information, feeling of contributing towards salvation of over-population. (B,K)

Can recruit workers to help with state issues, as Sacramento is capitol. Much information and direction which I can relate to state level. (K,B)

None; however, if my professional schedule wasn't over-loaded, I would love to be an active participant in the N.Y.-Chapter. Information and guides regarding population-control progress, problems, and f.i., letters which I can write to legislators. (B,A,H)

None. Information, and satisfaction of supporting an important cause. (B,D,A)

None. Some information, satisfaction in seeing some efforts made in extremely important issues. (B,D,A)

I am a new member and have only had contact with one member who joined for me. I enjoy the literature and hope to eventually get involved. (B,G)

I learned from and am stimulated by the people I associate with in ZPG. Am active in sterilization and abortion and it is helpful for me to know what ZPG is doing on those issues. (G,B)

Being with people who talk the same language. General roundoup of important aims. (G,B)

Local just folded! But in past was a rallying pt. for like-minded people - up-to-date info on population issues, esp. legislation. (G,B)

The comradery of the local members, statistical support. Population growth statistics which aid support to my arguments on behalf of the National Organization for Non-Parents. (G,B, other private)

Opportunity to explore local implications of ZPG and to debate issues with other concerned and informed people. Information in publications, notice of timely lobbying issues, from both a feeling of being a good citizen and practicing what I preach. (B,G,H)

Monthly meetings are very important to review and interpret output from the national office, and to discuss local issues. From our national newspaper I gain information to forward to those with whom I come in contact. (B,H,K)

Only what I gain as an inhabitant of earth. (C)

None. Nothing directly - only as the world gains. (C)

Personally little or nothing. See above = "L". Giving my offspring a living chance. (C,H,K)

None. I feel the world and myself will benefit from population reductions. (C,K)

None. I gain a better quality of life as everyone else will from a less crowded world. (C,K)

Greater likelihood of less disastrous world for our child than if no ZPG. (K,C)

An effort to maintain some population control means in the area where I live. The national political activities have a very direct effect on one's life. (K,C)

None. Some important aspects of my life are threatened by continued population growth. As ZPG attains its goals, I gain. (C,E)

None. The satisfaction of backing a good cause. (D)

None. Some consolation, I don't feel I'm so alone in its cause. (D)

No personal gains. Good cause - there are too God damn many ass holes around already. (D,K)

Helping a right cause that lacks mass appeal. Local person to person contact. Info, resources. (D,G,B)

Satisfaction of K. (D,K)

None. Nothing except the satisfaction of helping reduce world population. (D,K)

Satisfaction of knowing I support a group in whose issues I strongly believe. (K,D)

Contact with people more active than myself in legislation activity. Nothing. (G)

I enjoy working with the others who are in the group. My personal gain is all indirect; I am working for my children. (G,A)

A unity with interested people, including ability to articulate and focus. Ditto. (G,H)

Activity relieved my depression. Friends made through ZPG provided needed human contact. Target for anger. (G,H)

Opportunity to meet people with similar ideas. Personal satisfaction of participating in a worthwhile cause and contributing towards solution to population problems. (G,A,D)

Personal contact with like-individual people. Information, direction on important issues. (G,B,A)

Become acquainted with people who share my views. Information. Influence on legislation. (B,G,A)

Information and a group of people who share some of my socio-political views. Information clearing-house; political info and feedback; direct lobbying action on congress and executive branch; financial and material resource helpful for the chapter. (B,G,A)

Sharing ideas with interesting people. Participation in a pressure group aimed at population control as a root issue. (G,H,K)

The knowledge that I have tried to protect mankind's future and many good friends with similar ideas. A belonging to the present and the future. (G,K,A)

Activities involving intelligent people with similar interests and knowledge. Great deal of informative material on birth control, population, abortion, immigration, laws and changes. Materials which I really enjoy receiving to keep up on all that is happening in an area that I am interested in and concerned about. (G,H,B)

Sense of accomplishment; enjoyable meetings. Sense of accomplishment; interesting trips to national meetings; informative meetings. (G,H,B)

Reinforcement of views, awareness of local issues. Nice people. Fairly good newsletter, keeping us aware of pending legislation. More direction needed. (G,H,B)

None that I know of. Satisfaction. (H)

Opportunity to work. Assistance. (H, other private)

Coordinating a chapter, writing the newsletter, running the speakers bureau. First nationally and then locally has certainly been a confidence builder. (H, other private)

Enjoyed being an officer in the Los Angeles Chapter for 3 years; became inactive in order to concentrate on the nuclear power issue. Am a board member and have served as chairperson of the National Nominating Committee of the Board. Am too busy otherwise to continue in these kinds of activities and have asked to be replaced on the Board. Have co-authored national resolutions on resource consumption and nuclear power. (H, other public)

I enjoyed serving as executive director for the time I did. Unfortunately had to resign due to personal family problem that kept me from being in Phila. (H)

I gained a great deal of recognition from speaking. (H)

None. Satisfaction in knowing of action. (H)

Satisfaction in a good cause. Ditto. (H,D)

The local chapter is part of the largest cause. I identify with the chapter. A successful chapter is a successful *me*. The national cause - part of a world cause, affects the world in which I live. ZPG makes my world a tiny bit safer. (H,D,C)

Satisfaction that we are doing what little we can to help the most important cause of the day. (H,K)

Personal satisfaction from having done my little bit to help stop population growth. Same as above. (H,K)

Participation in activities affecting the most critical problem of my community. Participation in activities affecting the most critical problem of the U.S. (H,K)

None. Feeling that I am supporting an effort to teach people about population control. (K,H)

I no longer enjoy going to ZPG meetings, but I feel I should support the group. Information. (H,K,B)

Not active in local chapter. Publicity for the cause of population growth control. (K)

Since my belated college years, my life goal was to learn what T. H. Huxley's book, *Man's Place in Nature*, formulated as the question. My "business" is poetry, and most of my poetry is on this subject, as my studies have been. (K, other public)

I just have not been able to participate because of other commitments - really sorry. We need organized and dedicated lobbyist - an individual has little power to influence governmental decisions. (K)

Stopping the destruction of nature and the environment by expanding populations. The same! (K)

None. Legislation - land use - zoning - population reversal. (K, other public)

Education of the public. Ditto. (K)

None. Force for a higher national awareness of population problems. (K)

None. Population control = a better quality to our lives, present and future. (K)

None. (to my knowledge) I will gain only if ZPG is successful in its goal. The things to be gained (or, more properly, saved) are all the benefits of a world with its human population in balance (living space, preservation of wild places, sufficient food and other needs, etc.). (K)

None. Reduction in population growth. (K)

Somehow, somewhere, ZPG efforts may be curbing population growth. (K)

Nothing. I am supporting an activity which will (may) lead to the degree of public awareness that *might* support a rational population policy - admittedly a dubious proposition. (K)

That I am supporting one of the most important priorities among contemporary issues. (K)

None. Populations status and ways to control population. (K)

I don't gain personally but I think the country will gain as a whole through the problems plaguing other over-population countries. (K)

Someone has to keep greater Palm Beach ZPG going. Must reach ZPG or man will kill all life on earth. (F,K)

To try to inform local residents of the threat of over-population in the local area. To become a part of a national organization to inform the world of the dangers of over-population. (K,D,A)

Good friends, good chance to really do something to change society in a good way population-wise. The latest information regarding population and the knowledge that my dues are going for the best possible cause. (G,A,B,D)

A mutual agreement of the population problem facing our area. The National Reporter and knowing that the dues are going to a good cause. (G,B,D,A)

Action, friends, information. Information, commitment. (G,H,B,D)

Friendship of people with similar interests and ideas, information involvement in local growth issues. Information, speaking opportunities, contacts. (G,B,D,H)

Don't belong. Feel I'm supporting worthwhile cause that could benefit mankind, including self. Gain material to inform self and others about over-population problems. (A,D,B,E)

I'm not trying to gain anything, I'm trying to help do something to solve a serious and largely un-recognized problem. On the local level, the fact that I enjoy working with the other involved chapter members is a fringe benefit. On the National level, the only fringe benefit I can think of is the newsletter. (I sometimes regret that the bulk of my dues goes to the National Office, rather than the local chapter). (A,K,G,B)

A sense of usefulness in a cause that needs more than it gets now. Useful information. I like helping support lobbying activities of ZPG National. (A,D,B,F)

Current data and a group of informed people with which to discuss it; feeling of accomplishment in local activities. Representation and influence in government. (B,G,H,A)

The knowledge that even a few can make a big difference if working together. Above feelings reinforced when compared with other chapters, and seeing how different people can contribute in different ways which can be productive as a model for local chapters. Sharing ideas on a higher level with less frustration, compared to small local meetings. Getting new ideas and associations in thought, and how to implement them. Working with people in an intense and concentrated way for several days. (G,H,B,A)

Cooperation with like-minded activities. Knowledge and national and world-wide effectiveness to a small degree. (G,H,B,A)

Contact with other people who have the same concern and who will work with me locally to help achieve an important goal. Chapter is not functioning at present but was until recently and I was very active in it. They supply information on population growth and related legislation, through the Reporter, which I need to know in order to support my views and to take action. Successes and positive action reported (at both National and Chapter level) give me a great sense of satisfaction and encouragement. (G,A,K,B,H)

None. A better environment for my family and friends. (other public and other private)

Eases my conscience. (other private)

None. Hope. (other private)

Referrals to my wife's place of employment. Satisfaction in helping to reduce drain on natural resources and thus help to maintain or preserve quality of life. (other private, other public)

My contribution is helping action on population control. Ditto.

A general change in society's attitude towards (changing society, not as much emphasis on childbearing & heterosexuality). Same.

None. None.

Not a member.

None. Very little. (Summary 4)

Nothing. (Summary 4)

Nothing. Nothing. (Summary 4)

None. Nothing. (Summary 4)

Nothing. Nothing. (Summary 4)

Nothing. Nothing. (Summary 4)

Nothing now because I'm not putting any energy into it. Same.  
(Summary 4)

None. (Summary 4)

I don't gain. Same. (Summary 4)

None. None. (Summary 4)

Gain nothing personally. Gain nothing personally. (Summary 4)

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