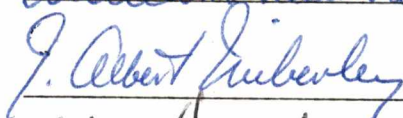
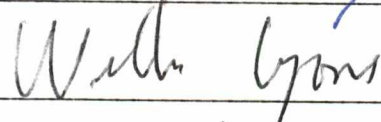


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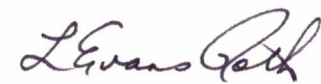
I am submitting herewith a dissertation written by Oliver Thomas Massey, Jr., entitled "An Application of Diffusion of Innovation Theory in the Analysis of Attitudes Toward the 1982 World's Energy Exposition." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.


John W. Lounsbury, Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:


Vice Chancellor
Graduate Studies and Research

AN APPLICATION OF DIFFUSION OF INNOVATION THEORY IN THE ANALYSIS OF
ATTITUDES TOWARD THE 1982 WORLD'S ENERGY EXPOSITION

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Oliver Thomas Massey, Jr.

June 1982

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Dedicated to Cathy and Marc
who made my accomplishment
meaningful

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ABSTRACT

The primary purpose of the present study was to investigate perceived social impacts and attitudes toward the 1982 World's Energy Exposition during its development by using concepts derived from research on the diffusion of innovations as presented by Rogers and Shoemaker (1971). A cross-sectional analysis of the project's development as well as the investigation of several changes over time were conducted in order to test the general utility of applying concepts from diffusion of innovation theory to an area traditionally investigated within the conceptual framework of social impact assessment. The theoretical formulations of Rogers and Shoemaker (1971) were utilized to predict support for the Exposition. The concepts studied included the observability, risk and advantages of impacts associated with the Exposition, personal characteristics, and adopter categories.

Data for the study were obtained from surveys conducted in 1979 and 1980. Three hundred thirty-five randomly selected residents of Knoxville, Tennessee participated in the 1979 survey. Three hundred forty-five residents participated in the 1980 survey. The two surveys shared 114 respondents in common, which served as a panel.

Results of the current study showed that personal characteristics and the perceived observability, risk and advantages of social impacts predict support for the Exposition. Knowledge of specific facts about the Exposition did not significantly predict support for the Exposition. The perceived ability to participate in decisions regarding the Exposition predicted support for the Exposition in both years of the survey.

The opportunity to participate apparently has relatively long lasting effects in terms of supporting the Exposition. The current study also supported the existence of differences between individuals who maintained their support or opposition to the Exposition and those whose support for the Exposition changed.

The study of large scale community developments which have often been investigated using techniques associated with social impact assessment can benefit from the use of innovation diffusion theory. Such developments would include nuclear power plant construction and water impoundment programs. As these projects become more frequent, psychologists must be increasingly concerned with understanding the impacts of such developments on the community. Innovation diffusion theory offers one more tool with which the community psychologist can further this understanding.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Social Impact Assessment	1
Social impact assessment and change over time	3
Diffusion of Innovations	5
Characteristics of innovations	7
Adopter categories	11
Characteristics of innovators	12
The decision process	13
Application of diffusion of innovation concepts to community projects	15
Rationale	18
Hypotheses for Research	18
II. METHOD	24
Interview Method	24
Participants	24
Interviewers	25
Procedure	25
Sampling	25
Interview procedure	26
Survey Instrument	28
1979 instrument	28
1980 instrument	30
III. RESULTS	34
Demographics	34
Panel-nonpanel comparison in 1979	34
Panel-nonpanel comparison in 1980	35
Comparison of 1979 and 1980 respondents	37
Knowledge in 1979 and 1980	39
Construction of Scales	39
Attitude	39
Localism-cosmopolitanism	40
Attitude toward change	42
Decision participation	42
Results of the Hypotheses	43
Hypothesis 1	43
Hypothesis 2	46
Hypothesis 3	49
Hypothesis 4	59
Hypothesis 5	65
Hypothesis 6	65

CHAPTER	PAGE
Hypothesis 7	70
Hypothesis 8	72
IV. DISCUSSION	78
Overview of the Results	78
Conclusion	87
Limitations of the Study	90
Implications for Future Research	91
LIST OF REFERENCES	94
APPENDIXES	100
Appendix A	101
Appendix B	103
Appendix C	105
Appendix D	112
Appendix E	119
VITA	126

LIST OF TABLES

TABLE	PAGE
1. Support for the Exposition in 1979 and 1980	38
2. Correlation Matrix for All Items Measuring Attitude Among Panel Respondents	41
3. Correlation Matrix of Attitude Toward the Exposition and Independent Predictors in Hypothesis 1	44
4. Multiple Regression Analysis for Attitudes Towards the Exposition	45
5. Alpha Reliability Estimates of Risk, Observability, Personal Advantage and General Advantage Scales	48
6. Multiple Regression Analysis of the Observability, Risks and Advantages on Attitude Toward the Exposition	50
7. Multiple Regression Analysis of Personal Characteristics on the Risk of Business Developments	51
8. Multiple Regression Analysis of Personal Characteristics on the Risk of Social Disruptions	52
9. Multiple Regression Analysis of Personal Characteristics on the Observability of Business Developments	53
10. Multiple Regression Analysis of Personal Characteristics on the Observability of Social Disruptions	54
11. Multiple Regression Analysis of Personal Characteristics on the Personal Advantage of Business Developments	55
12. Multiple Regression Analysis of Personal Characteristics on the General Advantage of Business Developments	56
13. Multiple Regression Analysis of Personal Characteristics on the General Advantage of Social Disruptions	57
14. Multiple Regression Analysis of Attitude Toward the Exposition	60
15. Correlation Matrix for Attitude Toward the Exposition, Knowledge and Observability, Risk and Advantage Factors	61

TABLE	PAGE
16. Multiple Regression Analysis of Low Knowledge Participants on Attitude Toward the Exposition	63
17. Multiple Regression Analysis of High Knowledge Participants on Attitude Toward the Exposition	64
18. Two-Tailed z Tests for Significant Differences in Correlations Between High and Low Knowledge Groups	66
19. Multiple Regression Analysis of the Certainty of Social Impacts in 1979 on Attitude Toward the Exposition	68
20. Multiple Regression Analysis of the Certainty of Social Impacts in 1980 on Attitude Toward the Exposition	69
21. Multiple Regression Analysis of the Observability of Social Impacts in 1980 on Attitude Toward the Exposition	71
22. Discriminant Analysis Summary for Group Membership	74
23. Significance of Discriminant Functions	75
24. Classification of Cases by Actual and Predicted Group Membership	77
E-1. Correlation Matrix of Items Measuring Cosmopolitanism	120
E-2. Means, Standard Deviations and Ranges for Independent Variables Used in the Prediction of Support for the Exposition	121
E-3. Loadings of Social Impacts on Factors of Personal Advantage	122
E-4. Loadings of Social Impacts on Factors of Risk	123
E-5. Loadings of Social Impacts on Factors of General Advantage	124
E-6. Loadings of Social Impacts on Factors of Observability	125

CHAPTER I

INTRODUCTION

Social Impact Assessment

Social Impact Assessment largely owes its origin to the passage of Public Law 91-90, the National Environmental Policy Act (NEPA) which mandated environmental impact statements for any large scale project which significantly affected the quality of the human environment (Friesema & Culhane, 1976). The environmental impact statement, which was intended as a multidisciplinary scientific evaluation of the impacts of large projects has since been expanded by court ruling to include those social impacts concerned with the quality of life of the effected residents (Francis, 1974). In spite of this ruling, the superficial treatment of social impacts in subsequent environmental impact statements has led to calls for social impact assessment independent of the environmental impact assessment process (Francis, 1974; Friesema & Culhane, 1976; Lewis, 1980; Wolf, 1974).

Social impact assessments, perhaps because of their close association with environmental impact statements, have tended to be cross-sectional analyses which function in a confirmatory nature, often carried out after planning decisions have been made (Finsterbusch, 1977), rather than as planning instruments intended for impact forecasting. They are cross-sectional not only in the sense of their synchronic nature, but also because of their failure to consider the reciprocity of impacts, and because they are often carried out on an

ad hoc basis (Olsen & Merwin, 1976). The difference between this traditional cross-sectional type of social impact research and what has been called social impact forecasts is described by Olsen and Merwin (1976) when they stated:

Impact research examines current or completed projects to identify and measure the impacts they actually are or have produced. It is, in effect, the study of ongoing social change processes. Knowledge gained through such research in turn provides a factual base for making impact forecasts.

An impact forecast is a prediction of the consequences that will most likely result from a proposed policy, program or project. Ideally, it should be based on detailed knowledge of both (a) existing social, economic and political conditions in the area affected, and (b) processes of social change and development. (p. 6)

One example of impact research as described by Olsen and Merwin is found in the literature on "Boom towns" (cf. Cortese & Jones, 1977; Davenport & Davenport, 1979; 1980). Cortese and Jones, for example, studied social impacts manifested in three boom towns identified by using data gathered from participant observation, surveys, public, and historical records. Their study gives a relatively complete descriptive account of the changes which occurred with the influx of construction workers. What is missing are the implied prerequisites for impact forecasts. Namely, the research was not longitudinal, and failed to delineate any change process which could be generalized to other impact assessment situations, or even used to forecast future changes at the same site. In spite of Cortese and Jones' implication that changing impacts would occur, no attempt was made to identify the process by which these impacts would manifest themselves. This shortcoming was not due to their unawareness of the possibility of changing impacts as they

state: "the construction of power plants includes large numbers of workers who leave when construction is finished; thus (building) a bust . . . into the boom" (p. 4).

Social Impact Assessment and Change Over Time

As early as 1965 Breese, Klingenstein, Cahill, Whelan, Church, and Whiteman (1965) described the construction of large military installations and discussed the sequential stages of construction and the differing impacts associated with each. In their analysis the impacts associated with the first stage of land acquisition will clearly be related to land values, the condemnation process, and the displacement of businesses and the resident population. As construction begins, impacts are most likely to be related to the increasing work force and the inconveniences concomitant to construction. During the operational phase of the installations, impacts associated with the migration and acclimation of the work force into the community are expected to be most important. Finally, given the possibility of some future closing of the installation, impacts associated with the sudden loss of the installation must be considered.

While the notion of changing impacts as described by Breese et al. was specific to the development of large installations, it can also be applied to more general cases of planned large scale community developments. This has been pointed out by Shields (1975) who states: "The point is that the impacts of high technology projects affect different people in different ways at different times" (p. 280).

Social impact assessment research in the realm of change over time is largely limited to two studies dealing with changes in perceived impacts and attitudes from preconstruction to postconstruction (Napier & Moody, 1979) and from preconstruction to peak construction (Meissen, Massey, Seibel & Bronfman, 1981). Napier and Moody studied attitude changes in relation to fragmentation of the "social fabric." They hypothesized that the changes brought about by the relatively sudden development and displacement of the community as a result of a reservoir project would occur too rapidly to allow community residents sufficient time to adjust to new roles and relationships. The expected results were decreases in community identification, integration and satisfaction, and increases in opposition to change and familism. The results showed that while significant changes occurred, fragmentation of the social fabric did not occur and, in fact, respondents held more positive attitudes toward their community following the project than before it began. The authors draw the conclusion that, in this instance, community disruptions were apparently successfully avoided or mitigated and disruption was thus not sufficient to "nullify the coping mechanisms" of the community (p. 701).

In the study by Meissen et al. (1981), community leaders' attitudes and perceptions of future social impacts were studied at the preconstruction and peak construction stages of a nuclear power plant. They found that there were no significant changes across the two year span in attitudes toward the plant, but large and significant differences occurred in the perceived impacts produced by the plant and its

construction. The study failed to determine whether some relationship existed between expected outcomes and attitudes towards the plant at the two stages of construction. A study by Sundstrom, Lounsbury, Schuller, Fowler and Mattingly (1977), however, found that residents' perceptions of expected outcomes were significant predictors of initial attitude toward the plant.

These two studies are the only longitudinal efforts at social impact assessment which could be found by the present author. Neither of these studies attempted to provide a model by which to integrate the relationships among the diffusion of knowledge and acceptance of the plant, changes in the respondents' attitudes and perceptions of the project through time, and the sequential nature of a projects' development.

Such an integration would require not only a longitudinal perspective, but also the use of a conceptual framework with which to explain the relationships among changes in knowledge, acceptance and attitude towards the social change. Such a framework is found in Rogers and Shoemaker's (1971) conception of the diffusion of innovations.

Diffusion of Innovations

Diffusion of innovation research in its most general description involves how adoption of a new project, whether an idea, process, or invention, spreads through the population over time. The newness of the innovation has been defined by the Federal Trade Commission (1976) as the instance in which a product is either entirely new, or has been

changed in a significant respect. The innovation itself, while it can consist of an idea or process, has largely been thought of in terms of its material nature, or in the sense of a technological innovation which possesses visible characteristics. Little research has dealt with the diffusion of nonmaterial ideas (Rogers & Shoemaker, 1971).

The general definition of innovation was amended by Robertson (1971) who attempted to refine the definition of an innovation by arguing that innovations should be classified in terms of their effects on established patterns of behavior. In Robertson's view, innovations can be classified according to the amount of disruption resulting from their introduction. Minimally disruptive innovations are called continuous innovations. Next are innovations which are moderately disruptive, called dynamically continuous innovations. Those innovations which are most disruptive are called discontinuous innovations.

The most inclusive definition of innovations is probably that of Lin and Zaltman (1973), who state that an innovation is "any idea, practice, or material artifact perceived to be new by the relevant unit of adoption" (p. 98). This definition is broadest both in its allowance for a "unit of adoption" larger than the individual, and in the fact that newness is defined in terms of the perception of the potential adopter. This definition, which is dissimilar to Rogers' and Shoemaker's only in its inclusion of extraindividual adoption units, will be used for the present study. Also adopted from Lin and Zaltman is the use of Robertson's continuous-discontinuous distinction as one of several characteristic dimensions useful in describing an innovation.

Characteristics of Innovations

In addition to differences in the amount of disruption an innovation causes, innovations can vary on several other dimensions. Some of these include: relative advantage, observability, complexity, trialability and compatibility (Rogers & Shoemaker, 1971); public/privateness and terminality (Lin & Zaltman, 1973); and perceived risk (Ostlund, 1974). The individual's perceptions of these characteristics of an innovation are thought to affect the rate of adoption of the innovation (Rogers & Shoemaker, 1971). However, they point out, it is the individual's perception of an innovations' characteristics which is important, and these perceptions depend on the stage in the diffusion process, as well as on the individual (Midgley, 1977).

Relative advantage concerns the advantages of the innovation over the alternative it replaces, and includes not only economic profitability, but also includes social approval and time saving (Fliegel, Kivlin & Sekhon, 1968), and savings from discomfort (Fliegel et al., 1968; Kivlin & Fliegel, 1967).

Observability deals with the visibility of effects of the innovation. Rogers and Shoemaker (1971) provide the example from agriculture that preemergent weed killers diffused very slowly in spite of their relative advantage because they did not leave dead weeds as visible evidence of their success.

Complexity includes not only the complexity of the idea behind the innovation but also the complexity of implementing it and its relative abstract versus concrete nature (Lin & Zaltman, 1973).

Trialability is concerned with the degree to which an innovation may be tested on a limited basis (Rogers & Shoemaker, 1971). A similar notion is divisibility, as provided by Lin and Zaltman (1973). Divisible innovations are those that can be tested without full commitment of resources. Fliegel and Kivlin (1966) operationally define this attribute as "divisibility for trial" or "how easy is it to try out first, on a small scale" (p. 238).

Compatibility concerns the extent to which an innovation is consistent with the values, experience and needs of the receivers. Compatibility also deals with the similarity of the innovation to the alternative it replaces, and the radicalness of the innovation.

Perceived risk concerns the degree to which risks are perceived to be associated with the innovation (Ostlund, 1974). While relative advantage might be hypothesized to concern potential benefits, perceived risk may be considered equivalent to potential costs.

The last two named characteristics include public/privateness, which is concerned with the inclusive nature of an innovation, and terminality, which deals with the time frame for possible integration of an innovation. Innovations which are collective, such that adoption by one member requires adoption by other members are public innovations. Fluoridation is an example of an innovation which is public. Fluoridation of the water supply affects those unfavorably predisposed to the innovation just as much as its supporters. Terminal innovations have some time constraint on their adoption, such that after a given time the innovation will no longer be useful or available.

The rate of adoption of an innovation has been proposed to be partly determined by these attributes. To the extent that a proposed innovation is perceived as compatible, advantageous, observable and subject to trial, the more likely an individual will be to adopt it, and the faster it will tend to diffuse (Kivlin & Fliegel, 1968; Fliegel & Kivlin, 1966). The extent to which an innovation is perceived as complex, public and terminal is assumed to have negative effects on the speed of an innovation's diffusion, though evidence is mixed for complexity (Rogers & Shoemaker, 1971) and has not been researched for terminality or public versus privateness (Lin & Zaltman, 1973). Perceived risk has also shown to decrease adoption (Ostlund, 1974).

Perceived attributes are not equally important, however, as each is thought to be important at different times in the diffusion process. Rogers and Shoemaker (1971) hypothesize for example, that a knowledge stage is the first stage of the diffusion process, in which the individual is first exposed to the innovation and acquires knowledge about its properties. In this stage it is thought that the innovation's complexity and compatibility are most important. The second stage is the persuasion stage in which the individual forms initial positive or negative attributes toward the innovation. During this stage relative advantage and observability would be of natural importance. The decision stage is the third stage in which the decision to adopt or reject an innovation occurs. An innovation's trialability should be important at this stage. During the final confirmation stage it is assumed that actual performance is the influencing factor, though Rogers

and Shoemaker (1971) do not hypothesize any innovation characteristic which might prove important.

Perceived attributes of an innovation, which partially determine the rate of diffusion, can in turn be partially explained by attributes of individuals (Midgley, 1977). As Midgley states:

For instance, a person's perception of the complexity of an innovation might well depend on their education and intelligence. It would obviously also depend on the nature of the innovation, and on situational effects such as information received from others, and so on. (p. 68)

In addition to education and intelligence, Midgley hypothesized that such personal factors as attitude to change, rationality, cosmopolitanism, knowledge, income, and attitude toward risk would also affect the individual's perception of an innovation's attributes. Midgley saw product knowledge as particularly important, as he considered it a factor in determining the perception of all of an innovation's attributes. Knowledge of the product was hypothesized to partly affect the perception of a product's compatibility, risk, relative advantage, complexity, observability and trialability. Midgley's hypothesis has not been supported in social impact assessment. For example, Lounsbury, Sundstrom, and Devault (1979) did not find significant differences between high and low knowledge groups in the perceived likelihood of outcomes or in acceptance of a proposed nuclear power plant. They did, however, find that knowledge acted as a moderator variable in the relationship between an individual's acceptance of the plant and perceived outcomes. It was found that the

high knowledge group displayed higher correlations between acceptance of the plant and beliefs than did the low knowledge group.

A stronger relationship between knowledge and acceptance has been provided by Metz (1966) who found that knowledge of fluoridation was directly related to acceptance, even though the strength of the association was not as great as hypothesized. Finally, Rogers and Shoemaker (1971), while not hypothesizing the nature of the relationship, do provide evidence that for the public as a whole knowledge or awareness of an innovation diffuses faster than adoption.

Adopter Categories

Adopters of an innovation are classified by Rogers and Shoemaker (1971) into several categories according to how early they adopt an innovation in relation to their peers. They assume an approximately normal distribution of adopters in any one time frame with a cumulative distribution showing a typical "S" shaped curve. Categories of adopters are defined in terms of the individuals adopting an innovation in standard deviation units from the average time of adoption. Thus the first 2½% of the population adopting an innovation, representing two-plus standard deviations from the mean, are labeled innovators. The next 13½% are labeled early majority, and the other 34% adopting before the mean adoption are labeled early majority. The first 34% adopting after the mean adoption time are labeled the late majority. The last 16% to adopt are labeled laggards. In past research, this categorization has generally been reduced to early adopters-late adopters, with

the early adopters being the first 16% of those who innovate and late adopters made up the other 84% (Midgley, 1977; Rogers & Shoemaker, 1971; Summers, 1971, 1972).

As Peterson (1973) and Robertson (1971) point out, however, it is not necessary or even beneficial to divide adopters into discrete categories on the basis of the standard deviations of a hypothetical normal curve. Robertson suggests that categories be defined in terms of the characteristics of the individuals such that boundaries are drawn where distinct changes in characteristics occur. Peterson suggests a similar method of categorization based on maximizing within group, as opposed to between group similarities. The advantage of the characterizing technique is that it does not force the data into a preconceived number of categories. As noted by Midgley (1977) in reporting this technique, Peterson admits there are disadvantages in that this method does not take into account either the reliability or the theoretical aspects of the resulting categories.

Characteristics of Innovators

Characteristics of the individual can influence adoption of an innovation directly, as well as by moderating an innovation's perceived attributes (e.g., Baumgarten, 1974; Metz, 1966; Midgley, 1974; Robertson & Kennedy, 1968). Rogers and Shoemaker (1971) in their review of the literature conclude that innovators are significantly different from the public as a whole. They tend to differ from the general public in having more education, higher social status, greater exposure to mass

media, more knowledge of innovations, being more cosmopolitan, less dogmatic, and more favorable to change (Rogers & Shoemaker, 1971).

A study which investigated individual characteristics and their relationship to rate of diffusion was conducted by Robertson and Kennedy (1968). They attempted to define some of the characteristics of consumer innovators and found that venturesomeness, social mobility, privilegedness, and social integration were significantly different for innovators versus noninnovators. Status concern, interest range, and cosmopolitanism were not significantly related to innovativeness.

Studies carried out by Baumgarten (1974) and Midgley (1974) also found significant differences between innovators and late adopters. Innovators were found to be more willing to take risks, have a more favorable attitude to change, be more socially integrated, and have greater exposure to mass media channels. Midgley (1974) also additionally found innovators to be younger.

Finally, Metz (1966) found that income, age, number of children and knowledge were related to attitudes toward fluoridation. In this study it was hypothesized that knowledge would act as an intervening variable between an index made of the three variables and attitudes. Instead, it was found that knowledge had an independent relationship to attitude. The final index of predisposition to fluoridation was thus constructed of all four variables.

The Decision Process

Another important variable in explaining the diffusion of an innovation concerns the level at which the decision to innovate occurs.

Most innovations, particularly those that consist of a new product, are adopted or rejected as the result of a decision made by the individual. In Rogers and Shoemaker's terminology these are called optional-innovation decisions. A more complex situation occurs when the decision to adopt or reject an innovation rests with group consensus, or with an individual with authority over the potential adopters. Situations involving group consensus have been termed collective innovation-decisions, and a good example is seen in the decision to fluoridate city water supplies (e.g., Crain, 1966; Rosenthal & Crain, 1965). In a collective decision, once consensus has been reached, all of those affected have little choice but to conform. In the case of fluoridation, the individual generally has little choice but to adopt fluoridated water (Rogers & Shoemaker, 1971).

The final category has been termed an authority-innovation decision, and has usually been equated with the decision process in organizations. Under the circumstances, the individual is forced to adopt or reject an innovation by someone in a superordinate position of power, and the individual's preference is unimportant (Rogers & Shoemaker, 1971). Rogers and Shoemaker make the additional distinction in the case of authority decisions that decision maker(s) and adopter(s) are different, while in the case of optional or collective decisions the individual is responsible for both decision and adoption. They note, however, that these three types of innovation-decisions represent points on a continuum with the individual having less control over adoption or rejection of the innovation as the decision varies from being optional

to being authority-directed. Because the decision to adopt or reject an innovation does not wholly rest with the individual in collective-decisions and authority-decisions, it has been hypothesized that acceptance of and satisfaction with collective or authority innovation decisions will be positively related to the degree of participations in the decision to innovate (Rogers & Shoemaker, 1971). Support for this hypothesis for collective decisions is found in a study by Seashore and Bowers (1963), who found that increasing the participation of industrial workers in work-related decisions increased work satisfaction and productivity. The relationship of participation to satisfaction and acceptance in authority-decisions is largely inferred by Rogers and Shoemaker (1971) and no evidence is provided to support it.

Application of Diffusion of Innovation Concepts to Community Projects

In spite of the fact that sociology serves as a common discipline for social impact assessment and for innovation research, there has been little recognition of the potential for the use of these perspectives in combination to understand community development or modernization (Pellegrin, 1978). Kelman and Warwick (1973), however, have recognized the usefulness of applying diffusion of innovation concepts to planned change. They pointed out that there are direct implications for social change to be found in the study of the processes responsible for the adoption or rejection of an innovation in that any planned changes is itself innovation.

Clearly, large community projects maintain at least superficial characteristics of innovations. Energy developments, water impoundment projects, urban renewal, and community development projects, could be generally regarded as discontinuous in disruption of established patterns of behavior (Cortese & Jones, 1977; Davenport & Davenport, 1979, 1980). Also such developments are public in the sense of Lin and Zaltman's (1973) definition of innovations which once implemented, affect supports and opponents alike.

Similarly, Rogers and Shoemaker (1971) provide the categorical distinction between collective and authority innovation decisions. As pointed out by the authors, these categorical differences are not always cleancut. Authority innovation decisions are generally thought of in terms of forced adoption within an organization. Collective innovation decisions are described in terms of community choices. It is clear, however, that in those cases where city officials act without community consensus on such an issue, there is little to refute the label of an authority innovation decision. This is the situation presented by the Exposition.

The relationship of social impact assessment to the diffusion of innovation process can be seen in Yin's (1978) analysis of the organizational change approach to innovation research. In analyzing this approach Yin describes a four stage innovative process which includes a prior stage, in which the organizational needs are identified; an initiation stage which is a planning stage; and an implementation stage, which Yin states is: "the actual occurrence of change when the plan

becomes reality, and during which unanticipated responses may occur" (p. 9). The fourth stage is the routinization stage in which the organization is stabilized and the change incorporated as part of normal procedure. The relevance of social impact assessment occurs in the implementation stage of the change process. We should recognize that impacts are concerned with both the planned changes and the "unanticipated responses" of individuals and system variables.

Rogers and Shoemaker (1971) also devote a chapter to consequences of innovations. They reaffirm the gap between social impact assessment and diffusion of innovation research when they speak of the fact that in spite of the importance of an innovation's consequences, little attention has been paid to its study. Their explanation for this deficit rests in the over emphasis on adoption per se, the assumption that the innovations consequences will be direct and positive, the questionable use of survey methods for investigating consequences, and the general difficulty in measuring an innovation's consequences. In fact, however, social impact assessment has provided methodologies for measuring the consequences of social change (Finsterbusch & Wolf, 1977; Wolf, 1974). And these methods do not fail to account for both costs and benefits (Sassone, 1977).

Both innovation research and social impact assessment, however, have suffered from an exclusive dependency on cross-sectional analyses (Eveland, Rogers, & Klepper, 1977; Peele, 1979) as opposed to longitudinal study. This is not to say that cross-sectional analyses are inappropriate. Eveland et al. (1977) see cross-sectional analyses as

precursors to longitudinal work, which serve to determine relationships among relevant variables. Longitudinal studies, however, are necessary for establishing causality among variables.

Rationale

The purpose of the present study was to test the utility of applying innovation research to large scale community projects. There have been implications that this use of innovation concepts will be fruitful (Eveland, Rogers & Klepper, 1977), and may contribute significantly to the understanding of changing attitudes to large scale projects. It is hoped that the emphasis on process found in innovation research will further the methodology of social impact assessment. Also, the concept of perceived impacts found important in social impact assessment (e.g., Sundstrom, Lounsbury, Schuller, Fowler & Mattingly, 1977) may prove useful in the field of innovation research. Finally, by examining attitudes and perceived impacts twice, first during the land acquisition phase of development and again a year later after construction has begun, the study provides a longitudinal analysis of two stages of the innovation's development, and allows for the study of the diffusion process as it affects attitudes and perceived impacts.

Hypotheses for Research

In applying diffusion of innovation concepts to the results of the 1980 survey, several hypotheses have been made.

1. Hypotheses concerning the relationship of personal characteristics to an individual's attitude toward EXPO 82. Based on the research

of Midgley (1974), Seashore and Bowers (1963) and studies reported by Rogers and Shoemaker (1971) it is hypothesized that an individual's attitude toward change, decision participation and education will be positively correlated to attitude towards EXPO and will account for significant variance in attitude toward the Exposition when used in a multiple regression procedure. It is also hypothesized that another personal characteristic, cosmopolitanism, as defined by a measure provided by Robinson (1966), will be positively correlated to attitude toward EXPO, and will also account for significant variance in attitude when used in a multiple regression procedure.

2. Hypotheses concerning perceived attributes of EXPO 82 and attitude toward EXPO 82. Based on the research of Fliegel, Kivlin and Sekhon (1968), Kivlin and Fliegel (1967) and Ostlund (1974) it is hypothesized that the individual's perception of the Exposition's relative advantage, observability, and perceived risk will be significantly related to attitude toward the Exposition. Relative advantage and observability are hypothesized to be positively related to favorable attitude to the Exposition and perceived risk is hypothesized to be inversely related to favorable attitude.

3. Hypotheses concerning the relationships among personal characteristics, perceived attributes of EXPO, and attitude toward EXPO. Derived from the hypotheses in 1 and 2, and as proposed by Midgley (1974), individual variables such as cosmopolitanism and are hypothesized to be significantly correlated with the individual's perceptions of the Exposition's relative advantage, observability and perceived

risk. It is hypothesized that while personal characteristics such as cosmopolitanism and education are correlated with the individual's perception of the Exposition's relative advantage, observability and perceived risk, personal characteristics and perceived attributes are both hypothesized to account for unique variance in attitude toward the Exposition.

4. Hypotheses concerning the role of knowledge in accounting for attitudes toward the Exposition. It is hypothesized that knowledge of the Exposition will serve as a moderator variable in the relationship between attitude of the Exposition and the individual's perception of the Exposition's advantage, observability and perceived risk. Support for this hypothesis is based on the study by Lounsbury, Sundstrom and Devault (1979) which showed that higher correlations between attitude and perceived outcomes were found for high knowledge than for low knowledge groups. Consistent with the findings of Lounsbury et al. and contrary to the finding of Metz (1966), knowledge is not expected to prove significant as an independent variable in accounting for variance in attitude toward the Exposition.

A chief advantage of the present proposal is the longitudinal nature of the survey. Additional hypotheses have been made in regard to changes which occurred over time. In part, these hypotheses are extensions of the hypotheses provided in 1 through 4.

5. Hypotheses concerning the changing importance of knowledge in accounting for attitude toward the Exposition. Rogers and Shoemaker (1971) hypothesize that there are four stages in the decision process

beginning with a knowledge stage, continuing through a persuasion and a decision stage, and ending with a confirmation stage. The knowledge stage has been described as the stage in which the individual is first exposed to the innovation and acquires knowledge about its properties. It is hypothesized that knowledge will predict attitude toward the Exposition in 1979. By 1980, however, knowledge will no longer serve to predict attitude but will serve as hypothesized in Hypothesis 4.

6. Hypotheses concerning the changing importance of perceived attributes of the Exposition in accounting for attitude toward the Exposition. Breese et al. (1965) and Shields (1975) have argued that different impacts are important at different times during the development of a project. Specifically Breese et al. have suggested that impacts associated with land values and displacement are important in the early land acquisition phase of development, while impacts associated with the inconveniences of the construction force will be most important during the construction phase of development. It was hypothesized in 2 that the individual's perception of perceived impacts will account for significant variance in attitude toward the Exposition in a multiple regression analysis. This hypothesis is supported by Sundstrom et al. (1977). However, it is hypothesized that perceived impacts associated with the introduction of the project such as improved community spirit and recognition of the town and impacts associated with the land acquisition phase, such as increased land values and housing shortages will account for more variance in the analysis of 1979 survey. Perceived impacts which can be associated with the construction phase,

including air pollution, traffic congestion, parking problems, noise and more and better jobs, are hypothesized to account for more variance in attitudes toward the Exposition in the 1980 survey.

7. Hypotheses concerning perceived participation in the decision to hold EXPO and attitude toward the Exposition. Participation in the decision to innovate is positively related to acceptance of the innovation in authority-innovation decisions (Seashore & Bowers, 1963). It was hypothesized in Hypothesis 1 that perceived participation in the decision to hold EXPO will account for significant variance in accounting for attitude toward EXPO in a multiple regression analysis of the 1980 survey. It is also hypothesized that from 1979 to 1980 the individual's perceived ability to participate in the decision to hold EXPO--the belief that s/he will be able to participate--will decrease. Based on these two hypotheses, it is hypothesized that the correlation between perceived participation and attitude toward the Exposition will decrease from 1979 to 1980.

8. Hypotheses concerning changes in attitude toward the Exposition. Based on research reported by Rogers and Shoemaker (1971), it is hypothesized that adopter categories can be distinguished by variables measuring the satisfaction at the possible discontinuance of the Exposition and a rating of the importance of the Exposition issue. While Rogers and Shoemaker make few distinctions between innovators and early supporters of an innovation, it is thought that important distinctions may be drawn between initial supporters of the Exposition and recent supporters. Additionally, distinctions may be drawn among

these groups and those who have changed their attitudes and now oppose the Exposition, and those who have maintained their opposition across both surveys. An exploratory discriminant analysis is therefore proposed to identify differences among groups particularly with regard to the concepts pertaining to diffusion of innovation theory including cosmopolitanism, attitude toward change and perceived support and opposition of the Exposition.

CHAPTER II

METHOD

Interview MethodParticipants

Three hundred thirty-five randomly selected Knoxville residents participated in the 1979 survey. Forty-three percent of the respondents were male and 57% were female. U.S. Census figures for 1980 (U.S. Census, 1982) reported that 46.8% of the population of Knoxville was male, and 53.2% was female. Fifteen percent of the respondents were black and 85% were caucasian. The ratio of whites to nonwhites in the survey closely corresponded to U.S. Commerce figures which show the city as a whole with 14.6% blacks and 84.2% whites (U.S. Department of Commerce, 1971). The average age of participants was 44 years and ranged from 18 to 91 years. Refusal rate for all of those contacted in the 1979 survey was approximately 15%. Of those refusing to participate, 45% were male, 55% were female, and 21% were black.

Three hundred forty-five residents participated in the 1980 survey. Two hundred thirty-one of the participants were randomly selected. The remaining 144 participants were interviewed in 1979 and agreed to participate again in 1980. Forty-three percent of the participants in 1980 were male and 57% were female. Fifteen percent of the respondents were black. The average age of participants in 1980 was 46 years with a range of 18 to 87 years. Refusal rate for all of those contacted in 1980, 40% were male, 60% female and 30% black. Among those respondents

who initially agreed to be contacted again in 1980, 70% of the interviews were successfully completed. Of those panel members who were not interviewed, 41% had moved, 21% refused and 38% could not be located. Participation in both 1979 and 1980 was voluntary and no remuneration was provided for participation.

Interviewers

Twenty undergraduates were used in each of the 1979 and 1980 surveys. Ten men and ten women were used in the 1979 survey. Thirteen women and seven men were used in the 1980 survey. The interviewers contracted to receive undergraduate research credit for conducting either fifteen or twenty interviews.

Before interviewing began the interviewers were trained in interview techniques and sampling techniques. Also, they were made familiar with the survey instrument and the area in which they were to interview. Weekly meetings were scheduled throughout the time interviewing took place to discuss any problems which might arise.

Procedure

Sampling

In selecting the sample, the sampling frame was drawn from the 1970 census of Housing, Knoxville, Tennessee (U.S. Department of Commerce, 1971). A probability proportionate multistage clustering technique as described by Babbie (1973) was used to draw the sample. In the first stage of the sampling process, all of the census tracts or portions of census tracts lying within the Knoxville city limits were identified,

and the population of each determined. The population of each tract or portion of tract was described in percent of total population. In the second stage of the sampling process a number of blocks were randomly selected from each tract proportionate to the percent of the total population which would allow for the desired sample size. The final stage of the sampling process involved randomly selecting one household and five alternatives from each randomly selected block. The large number of alternatives made allowances for the inevitable number of refusals and vacancies and for residents out-of-town. No alternatives were provided for the 161 panel members in the 1980 survey. The six households were randomly selected in sequence, with the first household selected becoming the intended site for interviewing and the second household selected becoming the first alternate. When drawing the 1980 sample, panel respondents who had already indicated a willingness to participate were excluded. This was done to insure against the possibility of a respondent's name appearing twice in the 1980 sample. Block statistics and individual household addresses were obtained from the Knoxville City Directory (1979, 1980) for the year in which the survey was conducted. This sampling process produced 335 households for the 1979 survey and 230 households for the 1980 survey.

Interview Procedure

The 1979 survey was conducted between July 20 and August 30, 1979. Interviews were conducted at the participant's residence and lasted approximately thirty minutes. Interviewers followed a designated survey format in conducting the interviews. The interview began with the

interviewer reading a short statement which identified them and their university affiliation and asking if the resident would be willing to answer a few questions. A copy of the introductory statement is provided in Appendix A. If the respondent did not wish to participate the interviewer recorded their sex and race on a form provided and continued with one of the alternate households provided. If the respondent agreed to participate, the interviewer read a prepared statement explaining the nature of the survey and assuring confidentiality of obtained information, in accordance with human subjects guidelines. The respondent was then provided a copy of this statement which was read, signed and dated and returned to the interviewer. A copy of this statement is found in Appendix B. After completing the interview participants were asked if they were interested in results of the survey and if they would be willing to participate again in the next year. Mailing addresses were obtained for participants who wished to obtain results in the survey. The names, addresses, phone numbers and survey identification numbers were recorded on a separate sheet of paper for all respondents who were willing to participate in the future.

The 1980 survey was conducted in the same manner between November 3 and December 31, 1980. In the second survey participants willing to participate in the future were listed as in 1979. In addition, a list was compiled of any resident who had participated in both surveys.

Survey Instrument

1979 Instrument

The survey instrument used in 1979 consisted of three sections. The three sections dealt with (a) community satisfaction, quality of life, knowledge of the proposed Exposition, perceived benefits and problems of the Exposition and perceived impacts of the Exposition, (b) participation in decision making in regard to the Exposition and attitudes toward a referendum concerning Expo, and (c) demographics. A copy of the 1979 survey instrument is found in Appendix C. Survey questions which were used in the present study are more thoroughly described below.

Knowledge of the Exposition. Knowledge of the Exposition was assessed by eight questions. These questions asked how long the Exposition would last, where the site was located within the city, whether the Mayor supported or opposed the Exposition, whether there was city, state, and/or federal funding for the Exposition, who purchased land for the Exposition, and who would own the Exposition site.

Perceived social impacts. The likelihood of twenty-two social impacts occurring as a result of the Exposition were measured in a Likert format. The seven points of the scale were (1) certain to happen, (2) very likely, (3) likely, (4) perhaps, (5) unlikely, (6) very unlikely, and (7) impossible to happen. The twenty-two social impacts were: downtown revitalization, bigger city atmosphere, increased traffic congestion, more public entertainment, more stores and shopping areas, increased business, increased noise, increased tourism, more and

better jobs, increase in undesirables, housing shortages, increased land values, increased crime, improved mass transit, state, national and international recognition, increased taxes, increase in visitors from foreign countries, parking problems, increase in city size, downtown parks, important energy capital and improved community spirit.

Decision participation. Participation in the decision to hold the 1982 Exposition in Knoxville was measured by five questions. The first question asked how much influence the respondent felt he or she had in decisions concerning Expo. There were four choices of response ranging from a great deal to some, very little and none. The remaining four questions dealt with whether the respondent was in favor of referendums concerning the city as a site for the Exposition and city funding for the Exposition, and whether or not the respondent believed such referendums would occur.

Attitude Towards the Exposition. Attitude toward the Exposition in 1979 was measured by one item. This question asked "If it were up to you alone, would you allow Expo 82 to be held in Knoxville?" Choices of responses were yes, don't know and no.

Demographics. The final section of the survey was concerned with demographics of the respondents and consisted of 14 questions. Participants were asked to give their age, income, education, number of children, marital status, employment status, number of years in Knoxville, and land-home ownership. Participants were also asked if they would agree to be interviewed the following year.

1980 Instrument

The survey instrument used in 1980 maintained the basic structure and format of the 1979 survey. Several modifications and additions were made to the survey, however, to specifically address the question posed in the hypotheses. These included questions concerning the respondents' cosmopolitanism (Robinson, 1969), attitude toward change, satisfaction with a decision to cancel the Exposition, the respondents' perception of the observability, advantage, importance and risk of impacts of the Exposition and several additional items measuring attitude toward the Exposition. A copy of the 1980 survey instrument is provided in Appendix D. The modifications and additions of interest in the current study are more fully described below.

Localism-cosmopolitanism. The respondents' localist-cosmopolitan orientation was measured with five items drawn from Robinson (1969). The respondent was asked to tell whether he or she agreed or disagreed with each of the five statements as they were read. For example, the first statement read "The most rewarding organizations a person can belong to are local clubs and associations rather than larger nationwide organizations." Choices of response ranged from strongly disagree, disagree, and slightly disagree to slightly agree, agree and strongly agree.

Attitude toward change. Two items measured attitude toward change in the 1980 survey. In the first question the respondent was asked to check one of four statements which best described his or her feelings about community change. The four statements were (a) the only way to

make things better is to change them, (b) a few bad ideas come along, but most changes are for the better, (c) most changes are for the worse, even though a few good ideas come along, and (d) changing things just makes problems worse. In the second question measuring attitude toward change the respondent was asked to check the statement which best described him or herself when it comes to trying new things in general. The four statements were (a) one of the first to try something new, (b) willing to try something as soon as a few friends have, (c) willing to try something only after its proved popular by a majority, and (d) one of the very last to try new things out.

Decision satisfaction. One item measured dissatisfaction with the possible cancellation of the Exposition. The item read "If the decision were made this week to cancel Expo 82, how satisfied would you be with the decision?" The seven choices of response were arranged in Likert format from 1 (extremely satisfied) to 7 (extremely dissatisfied).

Observability of impacts. In the 1980 survey the observability of perceived impacts was measured as well as the certainty of their occurrence. Certainty of impacts were measured on a seven point Likert scale as in the 1979 survey with the exception that respondents were able to indicate any impacts they felt were already occurring. The introduction to this statement read: "Next, I'd like to ask you some questions about community change and Expo. If Expo comes to Knoxville a number of changes could occur. Referring to Roman Numeral II, please tell me whether or not this change has occurred. If it has not, tell me how likely it is to occur, if it has happened, how apparent is it?"

Those potential impacts which the respondent identified as already occurring were coded as being certain to happen. The respondent then rated the impacts which were already happening for their observability. The four choices of response for observability of impacts were: very apparent, apparent, somewhat apparent and not at all apparent. Those impacts that the respondent judged as not already occurring were coded as not at all apparent. In the 1980 survey air pollution was added to the list of potential social impacts.

Personal and general advantage, personal importance and risk. In this section the interviewer read an introductory statement to the respondent which stated: "As I read each item please refer to Roman Numeral III and tell me whether each phrase describes the change I name. Answer yes if it does describe the change, no if it does not, and unsure if you can't decide. The first possible change is downtown revitalization. Do you believe this potential change is of some personal advantage or benefit to you? Is this an important issue to you? Is it risky or potentially hazardous to you? Is it an advantage to the city as a whole?" Each of the 23 potential impacts was rated on all four dimensions.

Attitudes Toward Exposition. In 1980 three items were used to measure attitude toward the Exposition. The first question followed wording used in 1979 surveys. The three choices of response in 1979 were replaced with a five point Likert format consisting of definitely yes, probably yes, undecided, probably no and definitely no. The respondent was then asked: "What would your answer have been one year

ago?" Choices of response were the same. The remaining two questions measuring attitude toward change asked "Do you think Expo has been good or bad for Knoxville so far?" and "In the long run, do you think Expo will be good or bad for Knoxville?" Choices of response for both questions were very good, somewhat good, mixed, somewhat bad and very bad. Respondents were also asked to estimate what their response a year ago would have been to both questions.

CHAPTER III

RESULTS

The results of the present study are provided below, beginning with demographic comparisons. The demographic comparisons include a comparison of the panel to the remainder of the 1979 sample and to the remainder of the 1980 sample. The 1979 sample is then compared to the 1980 sample with respect to attitude toward the Exposition and knowledge of the Exposition.

Construction of the scales used in the analyses of Hypotheses 1 through 8 is then described. Estimates are given for the internal consistency of each scale. The tests of the eight hypotheses are presented next. The analyses for each hypotheses are presented separately.

DemographicsPanel-Nonpanel Comparison in 1979

Panel respondents are those respondents who completed questionnaires in both 1979 and 1980. A comparison of panel respondents to those who participated only in the 1979 survey was conducted to show that the panel respondents were representative of this larger randomly selected group. This comparison was made because panel participation was voluntary and self selection factors might be operating so as to produce a panel from which generalizations could not be made to the original sample.

Several variables which might discriminate between nonpanel and panel participants were examined for significant differences using the appropriate t -test or Chi square test. Few significant differences were found between panel members and other respondents in 1979. Chi square tests for significant differences in the sex and race of panel and nonpanel respondents were not significant ($\chi^2 = .006$, $df = 1$; $\chi^2 = 2.28$, $df = 1$; respectively). Forty-three percent of panel respondents were male and 57% were female. Caucasian respondents made up 89% of the panel with 11% being Black. Differences in educational level and family income were nonsignificant [$t(328) = 1.05$; $t(326) = .21$, respectively]. Significant differences were found in the average age of respondents and in the average number of years in the city. The average age of panel respondents was 47.6 years and of nonpanel participants was 42.7 years [$t(321) = 2.33$, $p < .05$]. The average years spent in the city for panel members was 31.8 years and for nonpanel respondents was 26.1 years [$t(326) = 2.55$, $p < .05$].

Particularly important as a basis for comparison between panel and nonpanel respondents were variables dealing with the Exposition. These include attitude toward the Exposition, knowledge of the Exposition, and belief that the Exposition would occur (all of which are described in more detail in the next section). No significant differences were found between panel and nonpanel participants on these measures [$t(330) = .67$, $t(333) = .65$ and $t(332) = .74$, respectively].

Panel-Nonpanel Comparison in 1980

No significant differences were found in the sex and race of panel respondents and nonpanel respondents in 1980 ($\chi^2 = 1.36$, $df = 1$;

$\chi^2 = 1.36$, $df = 1$; respectively). No significant differences were found in education, income, age or the number of years in the city for panel and nonpanel respondents in 1980 [$t(305) = .73$; $t(297) = 1.26$; $t(304) = .83$ and $t(311) = .75$]. No significant differences were found between panel and nonpanel participants on a composite measure of attitude toward the Exposition [$t(301) = .37$]. The construction of this composite measure is described in the following section. No significant differences were found between panel and nonpanel participants in the expectation that the Exposition would occur [$t(311) = .10$]. A significant difference was found between panel and nonpanel participants in knowledge of the Exposition. The average level of knowledge for panel respondents was 5.7, and for nonpanel participants was 5.1 [$t(279) = 2.81$, $p < .005$]. Panel and nonpanel participants were also compared for differences on several additional variables unique to the 1980 survey which dealt with the Exposition. These three items dealt with the participant's intention to attend the Exposition, the perceived proportion of the population which supported the Exposition and the perceived proportion of the population which opposed the Exposition. No significant differences were found between panel and nonpanel participants on these three variables [$t(310) = .04$; $t(303) = .27$; $t(304) = 1.5$, respectively].

Panel respondents can be considered roughly equivalent to the other respondents in 1979 and 1980. Panel respondents in 1979 were older and more long-term residents than other 1979 respondents, but this difference disappears in the panel's comparison to the other respondents in

1980. There is a difference between panel respondents and the other 1980 respondents in knowledge of the Exposition. The higher knowledge exhibited by panel respondents may be due to test-retest effects (Cook & Campbell, 1979). Participants in the 1979 survey may also have sought information about the Exposition after exposure to the interview process. Important variables dealing with the Exposition, such as intention to attend, perceived support and perceived opposition were not significantly different for panel and nonpanel respondents.

Comparison of 1979 and 1980 Respondents

Several changes were expected to occur between 1979 and 1980 in regards to attitude toward the Exposition, knowledge of the Exposition, and belief that the Exposition would occur.

In 1979, 39% of respondents answered "yes" when asked if they would allow the Exposition to occur if it were up to them. Fifty-one percent answered "no," and 10% were unsure. While slightly over half of the respondents were against the Exposition in 1979, the great majority still expected it to occur (see Table 1). When asked if they believed if the Exposition would happen, 88% of respondents said "yes." Only 6% said "no" and 2% were undecided.

Five choices of response were available to the question "If it were up to you alone would you allow Expo?" in 1980. Nineteen percent of the respondents answered "definitely yes" and 24% answered "probably yes." Sixteen percent of the respondents were unsure or did not know if they would allow the Exposition to occur. Thirteen percent answered "probably no" to the question and 28% answered "definitely no" (see

Table 1
Support for the Exposition in 1979 and 1980

	Number	Would Allow Expo Percent
<u>1979</u>		
Yes	128	39%
Don't Know	35	10
No	168	51
<u>1980</u>		
Definitely Yes	62	19%
Probably Yes	80	24
Don't Know	54	16
Probably No	43	13
Definitely No	94	28

Table 1). By summing the two "yes" responses and the two "no" responses, results can be compared to the responses in 1979. Forty-three percent of respondents were in favor of the Exposition, 16% were undecided and 41% were against the Exposition. This represents a 10% drop in those opposing the Exposition and a 4% increase in those supporting the Exposition. When asked if they believed the Exposition would occur, 96% said "yes," 1% said "no" and 3% were uncertain or did not know. Clearly, by November of 1980, virtually everyone believed the Exposition would occur.

Knowledge in 1979 and 1980

Knowledge of the Exposition in 1979 and 1980 was measured by summing the number of correct responses to eight questions (Appendix D, I 9a-9h). In 1979, the median number of items correct was 4.36 and the mean number of items correct was 4.25. In 1980, the median number of items correct was 5.46 and the mean number of items correct was 5.29.

Construction of Scales

Attitude

In the 1980 survey several items were added to the survey instrument to be used in the development of a measure of the respondents' attitude toward the Exposition (Appendix D, I 13, 14; II 10). The three questions used in constructing the scale included: "If it was up to you alone, would you allow Expo 82 to occur?," "Do you think Expo has been good or bad for Knoxville so far?," and "In the long run, do you think Expo will be good or bad for Knoxville?" The respondent's score was computed by

converting his or her responses on each of the three items to a simple $\underline{z}$ score ($M = 0.00$, $SD = 1.00$) and summing to form a composite score. The reliability of the constructed scale was measured using Crombach's Alpha. The resulting estimate of reliability of .80 was considered adequate for the scale. This composite attitude score was subsequently used in tests of the hypotheses for the 1980 data set.

The 1979 survey utilized only one question to assess attitude which read "If it was up to you alone, would you allow Expo to occur?" An attempt was made to determine if responses to this question were related to the three items measuring attitude in 1980. The correlation matrix for panel respondents for questions measuring attitude in 1979 and 1980 is presented in Table 2. The correlation between the question common to both surveys was $\underline{r} = .49$. This value was considered satisfactory given that some change in support was expected to occur, and given the change in the question format from a 3-point to 5-point Likert scale.

Localism-Cosmopolitanism

A composite score for localism-cosmopolitanism was constructed for respondents by converting each of the five items to simple $\underline{z}$ scores and then summing them to form the composite (Appendix D, I 8a-e). These five questions were reported by Robinson (1969) as a measure of localism-cosmopolitanism. Earlier research (Dye, 1966) had found these items to be a stable measure of cosmopolitanism which significantly correlated with acceptance of issues of social change such as support for mass transit. The correlation matrix for these items is presented in

Table 2
Correlation Matrix for All Items Measuring
Attitude Among Panel Respondents

	X_1^*	X_2	X_3
X_2	.523		
X_3	.378	.680	
X_4	.102	.390	.494

* X_1 = "Has Expo been good or bad so far?" (1980)

X_2 = "In the long run, will Expo be good or bad?" (1980)

X_3 = "Would you allow Expo to occur?" (1980)

X_4 = "Would you allow Expo to occur?" (1979)

Appendix E, Table E-1. Assessment of the internal consistency of the constructed scale produced a Crombach's alpha value of .73.

Attitude Toward Change

As in the case of previously constructed scales, the two items which measured attitude toward change were converted to z scores and summed to produce a composite score (Appendix D, I 24, 25). The correlation between these two items was only $r = .34$. Crombach's alpha was computed for the scale but it was unsatisfactorily low ($\alpha = .50$); therefore, subsequent tests used the two items as separate measures of attitude towards change.

Decision Participation

Participation in the decision making process for the Exposition was measured by constructing a scale composed of four questions dealing with a city referendum (Appendix D, II 8a, c, d, f). It was assumed that a popular vote such as a referendum serves as the vehicle for public participation in the decision to hold the Exposition. Two questions asked if the participant was in favor of referendums concerning city funding, and the city as the site for the Exposition. The second two questions asked if the participant believed these referendums would occur. If the respondent was in favor of a referendum and believed it would be held, or if the respondent was against a referendum and believed it would not be held, he or she was assigned a score of 3 as having high decision participation on that item. If the respondent's preference for a referendum did not correspond to his or her beliefs

that such a referendum would occur, he or she was assigned a score of 2 or 1 determined by the extent of disagreement between preference for the referendum and the belief that it would occur. A score was obtained for each of the two sets of referendum questions and was summed to produce the decision participation measure. The correlation between these two scores was $r = .44$.

Results of the Hypotheses

Hypothesis 1

To test the relationship between attitude toward the Exposition and personal characteristics such as attitude toward change, perceived decision participation, education, and cosmopolitanism, a stepwise multiple regression analysis was performed. The attitude scale tapping support for the Exposition was considered the dependent variable. Decision participation, a question concerning perceived influence in decisions concerning Expo (1980, II, 1), two questions measuring attitude toward change (1980, I, 24-25), amount of education (1980, III, 11), and the cosmopolitanism scale described earlier, were entered as independent predictor variables. Descriptive statistics for these variables are provided in Appendix E, Table E-2. The correlation matrix for variables in the multiple regression analysis is provided in Table 3. The summary table for the multiple regression analysis is provided in Table 4. Fourteen percent of the variance in attitude towards the Exposition was accounted for by three variables--decision participation, influence in decisions regarding the Exposition and attitude toward

Table 3
Correlation Matrix of Attitude Toward the Exposition
and Independent Predictors in Hypothesis 1

	X_1^*	X_2	X_3	X_4	X_5	X_6
X_2	.139					
X_3	.185**	.179*				
X_4	.132	.310**	.334**			
X_5	-.136	-.348**	-.172*	-.308**		
X_6	-.289**	-.160*	-.016	-.096	-.003	
X_7	.219**	-.150*	.108	.152*	-.067	-.013

* X_1 = Dependent measure, attitude toward the Exposition

X_2 = Cosmopolitanism

X_3 = Attitude toward community change

X_4 = Attitude toward general change

X_5 = Number of years of education

X_6 = Decision participation

X_7 = Perceived influence in Exposition decisions

Note: Low scores on the two variables number of years of education, and decision participation represent low levels of these attributes. For the remaining variables low scores represent high levels of the attributes in question.

* $p < .05$

** $p < .01$

Table 4
Multiple Regression Analysis for Attitudes Towards the Exposition

Variable	Simple r	Multiple R	Multiple R ²	Change in Multiple R ²
Decision participation	-.28	.28	.08	.08**
Perceived influence	.21	.34	.11	.03**
Attitude toward community change	.18	.37	.14	.03**
Educational level	-.13	.39	.15	.01
Cosmopolitanism	.13	.39	.15	--
Attitude toward general change	.13	.39	.15	--

** p < .01

community change. The incremental R^2 value for all three variables was significant at the $p < .01$ level. The multiple regression analysis yielded a significant overall effect for the three items [$F(3,285) = 15.95, p < .01$]. Cosmopolitanism, education, and attitude toward general change did not contribute significantly to the prediction of attitude beyond the other three variables.

Hypothesis 2

This hypothesis involved testing the relationship between support for the Exposition and the individual's perception of the observability of impacts brought by the Exposition and the perceived risks and advantages associated with these impacts. In both years of the survey, the likelihood of twenty-three potential social impacts were assessed using a seven-point Likert scale. To address Hypothesis 2, the 1980 survey included a measure of the risks, personal advantages, general advantages and observability of each of these impacts.

For the purpose of Hypothesis 2, it was important to identify a relatively small set of reliable scales measuring the risks, personal advantages, general advantages and the observability of social impacts. This set of scales would subsequently be used as independent predictors of support for the Exposition. Because of the potential problems of multicollinearity and the interpretation of significant tests with a large number of possible predictors, the number of predictors was reduced by extracting a limited set of factors from each of the four sets of variables. Four factor analyses were conducted, one based on the perceived risk of social impacts, one based on the observability of

social impacts, one based on the personal advantages of social impacts and one based on the general advantages of social impacts. A principal factor analysis with iterations was conducted in each case, using varimax rotation and extracting all factors with eigenvalues greater than 1.00. The factor solution for risk produced four factors, and for observability, personal advantage and general advantage produced five factors. The set of 19 factors was still considered too unwieldy for purposes of prediction. The set of factors was further reduced by collapsing the variables in each of the four solutions into the first two factors for that solution. A variable was considered to load on whichever of the two factors it loaded higher on. This technique resulted in two factors for each of the four dimensions. The loadings for variables on the sets of factors are provided in Appendix E, Tables E-3 through E-6. A simple sum scale was created from each factor by adding all the variables loading on that factor together and then dividing by the number of variables. To assess the reliability of the created scales, Crombach's alpha was computed for each scale. Individual items were deleted where warranted to increase the reliability of the scales. The reliability estimates for the final scales are provided in Table 5.

To test the hypothesized relationship between attitude and the risk, observability, personal advantage and general advantage of social impacts, the scales were used as independent predictors in a stepwise multiple regression analysis with attitude toward the Exposition as the dependent variable. Four variables proved significant in the multiple regression analysis. These included: the personal advantage of

Table 5

Alpha Reliability Estimates of Risk, Observability,
Personal Advantage and General Advantage Scales

Scale	Alpha
Risk	
Business and community development	.89
Social disruptions	.75
Observability	
Business and community development	.82
Social disruptions	.81
Personal Advantage	
Business and community development	.88
Social disruptions	.83
General Advantage	
Business and community development	.82
Social disruptions	.74

business development, the risk of business development, the observability of business development, and the observability of social hazards. The summary table for the multiple regression analysis is provided in Table 6. The four variables each contributed significantly to the variance accounted for in attitude toward the Exposition.

Hypothesis 3

To test the predictive power of personal characteristics in accounting for an individual's perception of the observability risks and advantages of social impacts, multiple regression analyses were performed. Cosmopolitanism, education, decision participation, perceived influence in decisions, attitude toward community change and attitude toward general change were used as independent predictors. A separate stepwise multiple regression analysis was run for each of the eight factors. The summary tables for the seven multiple regression analyses which were significant are provided in Tables 7 through 13.

The multiple regression analysis for the risk of business developments yielded a significant overall regression effect [$F(2,245) = 7.65, p < .01$]. Two variables, attitude toward general change and education each accounted for significant variance in the perceived risk of business development (see Table 7). Only one variable accounted for significant variance in the multiple regression analysis of the risk of social hazards [$F(1,246) = 4.52, p < .05$]. This variable was decision participation (see Table 8).

The multiple regression analyses for the observability of business developments and the observability of social hazards each yielded

Table 6

Multiple Regression Analysis of the Observability, Risks and Advantages
on Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change	Standardized Beta
Personal advantage of business development	.33	.33	.11	.11	.295**
Risk of business development	.24	.43	.19	.08	.281**
Observability of business development	-.16	.44	.20	.01	-.217**
Observability of social hazards	.05	.46	.21	.01	.170*

* $p < .05$ ** $p < .01$

Table 7
Multiple Regression Analysis of Personal Characteristics
on the Risk of Business Developments

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Attitude toward general change	.21	.21	.04	.04**
Education	-.17	.24	.06	.02*
Decision participation	-.12	.26	.07	.01
Attitude toward community change	.17	.28	.08	.01
Cosmopolitanism	.07	.29	.08	--
Perceived influence	.06	.29	.08	--

* $p < .05$

** $p < .01$

Table 8
Multiple Regression Analysis of Personal Characteristics
on the Risk of Social Disruptions

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Decision participation	-.13	.13	.02	.02*
Education	-.10	.17	.03	.01
Cosmopolitanism	.00	.18	.03	--
Attitude toward community change	.06	.19	.03	--
Perceived influence	.04	.19	.03	--
Attitude toward general change	.03	.19	.03	--

* $p < .05$

Table 9
Multiple Regression Analysis of Personal Characteristics
on the Observability of Business Developments

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Perceived influence	-.25	.25	.06	.06**
Decision participation	-.12	.29	.08	.02**
Cosmopolitanism	.09	.31	.09	.01
Attitude toward community change	-.05	.31	.10	--
Education	-.06	.31	.10	--
Attitude toward general change	-.01	.31	.10	--

** $p < .01$

Table 10
Multiple Regression Analysis of Personal Characteristics
on the Observability of Social Disruptions

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Decision participation	-.16	.16	.02	.02*
Perceived influence	-.12	.21	.04	.02*
Attitude toward general change	.10	.23	.05	.01
Attitude toward community change	-.07	.25	.06	.01
Education	.07	.26	.07	.01
Cosmopolitanism	.00	.26	.07	--

* $p < .05$

Table 11
Multiple Regression Analysis of Personal Characteristics
on the Personal Advantage of Business Developments

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Attitude toward community change	.18	.18	.03	.03**
Attitude toward general change	.18	.22	.05	.02
Decision participation	.02	.22	.05	--
Education	-.08	.22	.05	--
Perceived influence	.00	.22	.05	--
Cosmopolitanism	.00	.22	.05	--

** $p < .01$

Table 12
Multiple Regression Analysis of Personal Characteristics
on the General Advantage of Business Developments

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Education	-.14	.14	.02	.02*
Decision participation	.11	.18	.03	.01
Cosmopolitanism	-.04	.19	.04	.01
Attitude toward general change	.07	.20	.04	--
Perceived influence	.06	.21	.04	--
Attitude toward community change	.00	.21	.04	--

* $p < .05$

Table 13
Multiple Regression Analysis of Personal Characteristics
on the General Advantage of Social Disruptions

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Perceived influence	-.14	.14	.02	.02*
Education	.10	.18	.03	.01
Attitude toward community change	.03	.18	.03	--
Attitude toward general change	-.09	.19	.03	--
Cosmopolitanism	-.09	.19	.03	--
Decision participation	.02	.19	.03	--

* $p < .05$

significant overall effects for two variables [$F(2,245) = 11.30$, $p < .01$ and $F(2,245) = 5.66$, $p < .05$, respectively]. In both analyses, perceived influence and decision participation each accounted for significant variance in the observability factors (see Tables 9 and 10).

The multiple regression analysis for the personal advantage of business development yielded only one variable which accounted for significant variance [$F(1,246) = 8.34$, $p < .01$]. This variable was attitude toward community change (see Table 11). The multiple regression analysis for the personal advantage of social disruptions did not yield any significant predictors.

The multiple regression analyses for the general advantage of business development and the general advantage of social disruptions each yielded one variable with a significant R^2 [$F(1,246) = 4.68$, $p < .05$ and $F(1,246) = 4.78$, $p < .05$, respectively]. Education accounted for significant variance in the general advantage of business developments ($R^2 = .02$) and perceived influence accounted for significant variance in the general advantages of social disruptions ($R^2 = .02$). These results are provided in Tables 12 and 13 respectively.

The individual characteristics of decision participation, perceived influence, education, attitude toward general change and attitude toward community change accounted for a statistically significant but a very small proportion of the variance in the seven business development and social disruption factors. The most variance accounted for in any of the eight social impact factors was 8% in the observability of business developments.

A stepwise multiple regression analysis was next conducted using attitude toward the Exposition as the dependent variable and individual characteristics and risks, advantages and observability factors entered as predictor variables. The results of this multiple regression analysis are provided in Table 14. Decision participation, the personal advantage of business development and perceived influence each accounted for significant variance in attitude toward the Exposition. The multiple regression analysis yielded a significant overall effect [$F(4,233) = 24.14, p < .01$].

Hypothesis 4

To ascertain if knowledge acts as a moderator variable in the relationship between perceived risk, advantage and observability of impacts and attitude toward the Exposition, it was first necessary to test for a direct correlation between knowledge and attitude, or knowledge and the independent variables. The correlations between knowledge and attitude toward the Exposition and the independent variables can be found in Table 15. Knowledge is significantly related to only one variable--the general advantages of social disruptions ($r = .13, p < .05$).

The subjects were then divided into low and high knowledge groups based on the median number of items correct. In 1980 the mean number of correct items was 5.29 and the median number of correct items was 5.46. Those who answered five or fewer correct were placed in a low knowledge group and those who answered six or more items correct were placed in the high knowledge group. One hundred seventeen subjects or 44.1% fell

Table 14
Multiple Regression Analysis of
Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Decision participation	-.31	.31	.10	.10**
Personal advantage of business development	.30	.44	.19	.09**
Risk of business development	.27	.51	.26	.07**
Perceived influence	.23	.54	.29	.03**
Observability of business development	-.16	.55	.30	.01

** $p < .01$

Table 15

Correlation Matrix for Attitude Toward the Exposition, Knowledge and Observability, Risk and Advantage Factors

Variable	Attitude	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈
X ₁ Risk of business development	.243**								
X ₂ Risk of social disruptions	.147*	.362**							
X ₃ Observability of business development	-.169*	.118	-.020						
X ₄ Observability of social disruptions	.051	.114	.038	.640**					
X ₅ Personal advantages of business developments	.327**	-.107	.028	-.319**	-.042				
X ₆ Personal advantages of social disruptions	-.024	-.251**	-.003	-.110	-.004	-.246*			
X ₇ General advantages of business developments	.168*	.281**	-.004	-.031	.083	.250**	-.172*		
X ₈ General advantages of business developments	-.014	-.269**	.020	-.107	-.027	.193**	.526**	-.259**	
Knowledge	-.080	-.074	-.100	-.075	-.027	.041	.040	-.104	.130

** p < .01; * p < .05

into the low knowledge category and 148 or 55.9% fell into the high knowledge category. A stepwise multiple regression analysis was repeated for each group of subjects with attitude toward the Exposition serving as the dependent variable. The results of the multiple regression analyses are provided in Tables 16 and 17.

For the low knowledge group, one variable significantly accounted for 12% of the variance in attitudes toward the Exposition [$F(1,115) = 16.33, p < .01$]. This variable was the personal advantage of business developments. In the high knowledge group, two variables significantly accounted for 22% of the variance in attitude toward the Exposition. The overall regression effect was significant with $F(2,145) = 20.69, p < .01$. The two variables were the risk of business development and the personal advantage of business development. The risk of business development, which did not account for significant variance beyond that accounted for by the personal advantage of business developments in the low knowledge group, accounted for significant variance in the high knowledge group.

To test for the significance of knowledge as a moderator in the relationship between attitude towards the Exposition and the independent variables the Fischer's r-to-z transformation (Hays, 1973) was also conducted for the seven independent variables. Cochran's test for the homogeneity of variance for the seven factors was conducted, producing no significant differences in variance between the high and low knowledge groups. The Pearson product moment correlation coefficients between attitude toward the Exposition and each of the seven factors in the two

Table 16
Multiple Regression Analysis of Low Knowledge Participants
on Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Personal advantage of business development	.35	.35	.12	.12**
Risk of business development	.11	.38	.14	.02

** $p < .01$

Table 17
Multiple Regression Analysis of High Knowledge Participants
on Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Risk of business development	.34	.34	.11	.11**
Personal advantage of business development	.29	.47	.22	.11**
Risk of social disruption	.25	.48	.23	.01

** $p < .01$

groups were transformed using Fischer's r-to-z and the two sample z was computed for the high and low knowledge groups. Correlation coefficients between attitude and the seven factors for the high and low knowledge groups and the corresponding z values are provided in Table 18. Using a two-tailed test of significance none of the seven factors was significant at $p < .05$. While slightly more variance can be accounted for by the two variables risk of business development and personal advantage of business development in the high knowledge group than in the low knowledge group, the two sample z's for the differences in correlations between high and low knowledge groups were not significant for any of the seven variables. The hypothesized moderating effect of knowledge on the prediction of attitude is not supported.

Hypothesis 5

Hypothesis 5 involved testing the changing importance of knowledge as a predictor of attitude from 1979 to 1980. Pearson product moment correlation coefficients in each year were compared using the Fischer's r-to-z transformation. Contrary to the hypothesized relationship, knowledge was not found to be significantly related to the attitude item in 1979 ($r = -.091$). The correlation between knowledge and attitude in 1980 was $r = .080$. The test for significant change in the correlation between knowledge and attitude from 1979 to 1980 was also not significant ($z = .13$).

Hypothesis 6

To assess the relative importance of perceived social impacts in 1979 and 1980, and to ascertain if different perceived social impacts

Table 18

Two-Tailed z Tests for Significant Differences in Correlations
Between High and Low Knowledge Groups

Variable	High Knowledge r^a	Low Knowledge r^b	Fischer's z
Risk of business development	.336	.107	1.62
Risk of social disruptions	.246	.043	1.68
Observability of business developments	-.116	-.242	-1.05
Observability of social disruptions	.143	-.028	1.37
Personal advantages of business developments	.289	.353	-.56
Personal advantages of social disruptions	-.038	-.041	-.02
General advantages of business developments	.177	.161	.13

$a_N = 148$

$b_N = 117$

are important during different stages of development a standard multiple regression analysis of the certainty of social impacts was conducted using attitude as the dependent variable for 1979 surveys. The results of the multiple regression analysis are presented in Table 19. The multiple regression analysis yielded a significant overall effect for eight variables [$R^2 = .38$, $F(8,310) = 23.89$, $p < .01$]. These included improved community spirit, increased crime, downtown revitalization, increased taxes, recognition of the town, parking problems, more and better jobs, and increased undesirables.

The standard multiple regression analysis for the 1980 survey used the certainty of social impacts as independent variables and the attitude scale as the dependent variable. The standard multiple regression analysis yielded a significant effect for two variables [$R^2 = .03$, $F(2,302) = 5.3$, $p < .05$]. These were increased undesirables and downtown parks (see Table 20). Because it was expected that certain impacts would have begun to occur during the construction phase of the Exposition in 1980, respondents were allowed to rate social impacts for their observability if the likelihood of an impact was no longer in doubt. A standard multiple regression analysis of the observability of social impacts in 1980 using the attitude scale as the dependent variable was performed. The standard multiple regression analysis yielded a significant overall effect for six variables [$R^2 = .17$, $F(6,300) = 10.45$, $p < .05$]. These six variables were the observability of more jobs, increased taxes, increased business, increased undesirables, more public entertainment, and the recognition of the town. The

Table 19
Multiple Regression Analysis of the Certainty of Social Impacts
in 1979 on Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Improved community spirit	.46	.46	.21	.21**
Increased crime	-.30	.52	.27	.06**
Downtown revitalization	.35	.56	.31	.04**
Increased taxes	-.30	.58	.33	.02**
Recognition of the town	.24	.59	.35	.02**
Parking problems	.25	.60	.36	.01**
More and better jobs	.35	.61	.37	.01*
Increase in undesirables	-.30	.62	.38	.01*

** $p < .01$

* $p < .05$

Table 20
Multiple Regression Analysis of the Certainty of Social Impacts
in 1980 on Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
Increase in undesirables	-.13	.13	.02	.02*
Downtown parks	.09	.18	.03	.01*

* $p < .05$

significant variables in the standard multiple regression analysis are presented in Table 21.

Several social impacts were important in both 1979 and 1980. These included: more and better jobs, increased taxes, increased undesirables and recognition of the town. Support for Hypothesis 6 was mixed. It was hypothesized that improved community spirit, recognition of the town, downtown revitalization, increased land values and housing shortages would be more useful predictors of attitude in 1979 than 1980. The results supported the hypothesis for improved community spirit and downtown revitalization but not for the remaining variables. It was also hypothesized that variables associated with the construction phase including air pollution, traffic congestion, parking problems, noise, and more and better jobs would be more important in predicting attitude in 1980. Results did not support this hypothesis. Parking problems was useful as a predictor in 1979 and not in 1980, while more and better jobs was useful as a predictor in both years.

Hypothesis 7

To test the relative importance of decision participation in the two years of the survey, two comparisons were conducted. The first of these was a test of the hypothesis that decision participation--the perceived ability to participate in decisions concerning the Exposition--would decrease from 1979 to 1980. Results of a t test supported this hypothesis [$t(604) = 7.30, p < .01$] with the mean perceived participation significantly lower in 1980 than in 1979.

Table 21

Multiple Regression Analysis of the Observability of Social Impacts
in 1980 on Attitude Toward the Exposition

Variable	Simple r	Multiple R	Multiple R ²	R ² Change
More and better jobs	-.22	.22	.05	.05**
Increased taxes	.21	.33	.11	.06**
Increased business	-.17	.36	.13	.02**
Increase in undesirables	.08	.38	.15	.02*
More public entertainment	-.11	.40	.16	.01*
Recognition of the town	-.13	.42	.17	.01*

** $p < .01$

* $p < .05$

The second comparison was a test for significant change in the Pearson product moment correlation between decision participation and attitude in 1979 and 1980. The simple correlations between decision participation and attitude in 1979 was $r = -.246$. In 1980 the correlation between decision participation and attitude was $r = -.289$. The Fischer's r -to- z transformation and z statistic were computed for differences between 1979 and 1980. The results were not significant ($z = .566$).

Perceived decision participation significantly decreased from 1979 to 1980. There was not a significant increase across the two years in the simple correlation between attitude toward the Exposition and decision participation.

Hypothesis 8

Respondents who participated in both years of the survey were divided into four groups for the purposes of Hypothesis 8. The first group was made up of early supporters, and included those panel members who were in favor of the Exposition in both years, as measured by the single attitude item common to both surveys. The second group was made up of recent supporters who were participants whose attitudes had shifted from neutrality to support, or from opposition to neutrality or support between 1979 and 1980. The third group of participants consisted of recent opponents of the Exposition. It included respondents whose attitudes had shifted from neutrality to opposition or from support to neutrality or opposition. The final group was comprised of long term opponents of the Exposition. These were respondents who had

maintained their opposition in both 1979 and 1980. Twenty-seven participants made up the early supporter group, 23 participants made up the recent supporter group, 13 participants made up the recent opponents group and 41 participants made up the group who had maintained opposition.

Differences between early supporters and recent supporters were first tested by comparing mean values of the observability, advantages and risks of social impacts by t tests. No significant differences were found between early supporters and recent supporters in the risks, observability or advantages of any social impacts. Differences among the four groups were then analyzed by means of a four group discriminant analysis. The intent was to distinguish between the four groups on the basis of their responses to several variables including personal characteristics, knowledge, perceived support and opposition, and perceived referendum importance. A stepwise discriminant analysis using group membership as the dependent variable produced eight significant variables. The results are presented in Table 22. Significance is based in the change in Rao's V. The significant variables included: satisfaction with the decision to conduct the Exposition, perceived opposition, the importance of the referendum in 1979, perceived support, importance of the Exposition issue, knowledge of the Exposition in 1980, attitude toward community change, and perceived influence in Exposition related decisions.

Three significant functions were extracted by the analysis (see Table 23). The first function discriminated between supporters

Table 22

Discriminant Analysis Summary for Group Membership

Variable	Rao's V	Change in V	Significance p<	Standardized Discriminant Function 1	Standardized Discriminant Function 2	Standardized Discriminant Function 3
Satisfaction with possible discontinuation of the Exposition	43.81	43.81	.001	.30	.02	.56
Perceived opposition	73.24	29.43	.001	-.19	.65	-.02
Referendum importance 1979	104.6	31.34	.001	.62	-.38	-.11
Perceived support	124.4	19.85	.001	.46	.59	-.41
Importance of Exposition issue	144.1	19.65	.001	-.43	.01	-.05
Knowledge in 1980	153.9	9.83	.05	-.02	.64	.23
Attitude toward community change	162.3	8.38	.05	.08	-.59	.50
Perceived influence	170.5	8.21	.05	-.18	-.42	-.09

Table 23
Significance of Discriminant Functions

Function	Eigenvalue	Percent of Variance	Wilks' Lambda	χ^2	DF	Significance $p <$
1	1.64	77.8	.248	115.54	30	.001
2	.24	11.6	.656	34.88	18	.01
3	.22	10.6	.817	16.70	8	.05

(groups 1 and 2) and opponents (groups 3 and 4) of the Exposition, while the second and third served to discriminate between early supporters and recent supporters and between recent opponents and long term opponents. The classification of cases by actual and predicted group membership is provided in Table 24. Seventy-five percent of the cases were classified correctly by the discriminant procedure.

The question of interest in Hypothesis 8 was concerned with confirming a distinction among adopter categories on the basis of individual characteristics, knowledge, and perceived support and opposition of the Exposition. The results of the discriminant analysis support the existence of four adopter categories and the notion of distinct differences between recent supporters and long term supporters, and between recent opponents and long term opponents. Just as we can determine differences between supporters of the Exposition and opponents of the Exposition. The discriminant analysis allows us to identify differences among long-term supporters of the Exposition, recent supporters of the Exposition, recent opponents of the Exposition and long-term opponents of the Exposition. As Table 24 shows group membership can be distinguished in 75% of the cases. As hypothesized, satisfaction with the possible discontinuance of the Exposition and the importance of the Exposition issue were both significant discriminators among adopter categories.

Table 24

Classification of Cases by Actual and Predicted Group Membership

Actual Membership	Cases	Predicted Group Membership		
		1	2	3
Early supporters	27	20(74.1)*	4(14.8)	0
Recent supporters	21	5(23.8)	14(66.7)	0
Recent opponents	12	2(16.7)	2(16.7)	4(33.3)
Long term opponents	38	1(2.6)	1(2.6)	1(2.6)
				35(92.1)

*Percent of row total

CHAPTER IV

DISCUSSION

Overview of the Results

The present study examined the utility of applying innovation diffusion concepts to a planned community change of tremendous potential social impact--the 1982 World's Energy Exposition. The results of the current study support the usefulness of innovation diffusion concepts. Innovator characteristics, and innovation characteristics both significantly predicted support for the Exposition. The results of the study also support the notion of adopter categories which differentiate among those respondents who have changed in their support for the Exposition and those who have not. The current study failed to confirm the hypothesis concerning the role of knowledge as a moderator variable, and only partially confirmed the changing importance of social impacts over time. The results of each hypothesis will be discussed below including possible explanations for the lack of positive findings for hypotheses that were not confirmed.

A consistent finding of innovation diffusion studies has been the importance of innovator characteristics in determining acceptance of an innovation. In the current study the use of personal characteristics to predict support for the Exposition produced generally positive results. Personal characteristics accounted for a significant proportion of the variance in support for the Exposition. The significant predictors included two measures of the perceived ability to participate or have

influence in decisions regarding the Exposition. The third significant variable was a measure of the individual's attitude toward community change.

One personal characteristic, which has been successful in previous research in the innovation diffusion literature, however, did not contribute significantly to the prediction of attitude beyond the other three significant personal characteristics. This was the measure of localism-cosmopolitanism. The failure of this measure to predict support for the Exposition was unexpected. The scale used was selected from several available scales (cf. Jennings, 1966; Dobriner, 1958) and was chosen on the basis of its length and ease of understanding and on the basis of its correlation to pertinent community issues such as support for mass transit, and centralized local government. In this instance, it was expected that an individual's local versus cosmopolitan orientation would be particularly useful in predicting an innovation occurring at the community level.

The second group of variables expected to predict support for the Exposition dealt with the risk, observability, and advantages associated with the Exposition. The results of the analyses supported the hypothesized relationship between the perceived outcomes associated with an innovation and support for it. The most important outcomes associated with a planned community development appear to be those concerned with positive impacts such as business development and community enhancement. In Hypothesis 2, three of the four factors which were significant in predicting support for the Exposition dealt with these issues. This

occurred in spite of the negative popular news coverage which the Exposition received (cf. Tomlinson, 1979), which might have been expected to sensitize the public to the many negative social disruptions which might occur because of the fair.

Among the dimensions of personal advantage, general advantage, risk and observability, personal advantage is the most powerful predictor of support for the Exposition. Factors of general advantage did not significantly predict support for the Exposition beyond the four significant variables. Both the observability of business developments and the observability of social disruptions accounted for significant variance in support for the Exposition. The significance of both observability factors suggest that in 1980 the observability of impacts supersedes the likelihood of impacts for predictive purposes. This is a consistent finding if we consider that likelihoods, as measures of probability, are useful in the absence of direct information. As these impacts begin to occur, the observability of impacts is likely to become a much more salient measure of social impacts to the respondent.

While both personal characteristics and variables associated with social impacts were expected to account for support of the Exposition, personal characteristics were also expected to account for support of the Exposition, personal characteristics were also expected to have some independent correlation with variables associated with social impacts. Education, cosmopolitanism, attitude toward change and perceived decision participation were all expected to affect an individual's perceptions of social impacts. Multiple regression analyses supported

the hypothesized statistical significance for several of these variables including perceived decision participation, education, and attitudes toward community and general change. A small proportion of the variance in social impact factors was accounted for, however. Eight percent of the variance in the observability of business developments was accounted for; in the other factors, 5% or less of the variance was accounted for.

An unexpected finding was that for both business development and social disruptions, the dimension best predicted was observability. This was unexpected since observability was likened to visibility and was expected to be less affected by personal characteristics than, say, the perception of risk or general advantage. The perception of such an outcome as increased land values as advantageous or risky would be expected to depend partly on education, attitude toward change, and cosmopolitanism. The observability of increasing land values in the community, however, was expected to be less affected by personal characteristics. It was expected that observability would be a less subjective measure than perceived risk or perceived advantage. This was not the case. Personal characteristics accounted for as much variance in the observability of social disruptions and in the observability of community developments as they did in the other social impact factors.

Personal characteristics and the social impact factors both accounted for unique variance in predicting support for the Exposition, as postulated by innovation diffusion theory. Two of the social impact factors, both dealing with observability, and the variable dealing with community change were the only variables which dropped from significance when entered stepwise in the prediction of support for the Exposition.

Clearly, there is utility in applying diffusion of innovation concepts to the analysis of a planned community change such as the 1982 Energy Exposition. The most successful application of innovation diffusion principles came in attempting to predict support for the Exposition. The intermediate step of predicting the perception of impacts from personal characteristics was less successful, even though a statistically significant proportion of variance in all but one of the social impact factors was accounted for.

Previous research (Sundstrom et al., 1977; Woo & Castore, 1980; Hughey, 1981) has shown that the perceived likelihood of impacts are often significant predictors of support of a community development such as a nuclear power plant. The method used in the current study allowed the respondent to report the actual observability of an impact (from very apparent to not at all apparent) when anticipated likelihood of occurrence was no longer in doubt. The technique offers an advantage in longitudinal work which spans a project's development in the community. Innovation diffusion theory suggests that during the confirmation stage of an innovations' introduction to a community, continued acceptance or support of that innovation rests upon confirmation of expected outcomes (Rogers & Shoemaker, 1971). When the likelihood of an impact is no longer in doubt, its observability in the community will be a useful predictor of attitude. This would include observing positive impacts and being able to note the absence of negative impacts.

Two hypotheses dealt with the role knowledge played in determining support for the Exposition. In Hypothesis 4 knowledge was examined to

determine if the 1980 correlation between support for the Exposition and the social impact factors was higher for high knowledge groups than for low knowledge groups. Hypothesis 5 dealt with the importance of knowledge in 1979, early in the Exposition's development when respondents were hypothesized to still be gaining information about the development. Neither hypothesis was supported. In regard to the first of the two hypotheses, knowledge did not significantly moderate the relationship between support for the Exposition and the social impact factors. The independent variables did not account for significantly more variance in support for the Exposition in the high knowledge group than in the low knowledge group. Similarly, knowledge in 1979 was not significantly correlated with support for the Exposition, and this correlation remained nonsignificant in 1980. One way to interpret these results in terms of innovation diffusion theory is that the 1979 survey may well have come about after the stage when individuals are first acquiring knowledge about the proposed change. In 1979 individuals may have been beginning to form their initial positive or negative attitudes toward the innovation--the persuasion stage, or in fact may have already decided to support or oppose the innovation--the decision stage. If this were the case, any moderating effects might occur in 1979 and if so, a direct correlation between attitudes and knowledge would not be expected. This is consistent with the findings of Meissen (1980). As a result, the negative findings of the current hypothesis are not necessarily inconsistent with innovation diffusion theory.

In 1980 we may expect the diffusion process to have reached the confirmation stage where knowledge is no longer relevant. Consistent

with this interpretation is the finding that likelihoods are no longer important in the confirmation stage, but instead, the actual performance or outcomes are important. Knowledge may play different roles in a community's support for planned community change, depending on the innovation's stage of development. In the earliest stage of development, called the knowledge stage, knowledge may predict support for this innovation. In the persuasion or decision stage which are the next stages in the adoption process, knowledge may act to moderate the relationship between the perception of outcomes and support. During the confirmation stage, when impacts are actually being seen and felt, knowledge as measured by awareness of specific facts, is unimportant. This interpretation could explain the inconsistent finding of the role of knowledge as a predictor (Mazur, 1975; Metz, 1966), the role of knowledge as a moderator (Lounsbury et al., 1979), and the current finding of knowledge as unrelated to the issue of support in 1980.

As the Exposition progressed, it was hypothesized that different impacts would become important in predicting support for the Exposition. This is consistent with previous research (Massey, Bronfman & Meissen, 1982) which found that the perceived social impacts which predicted attitude toward a nuclear power plant changed over time. The support for this hypothesis was mixed, with a few impacts becoming less important as hypothesized (improved community spirit, downtown revitalization), while others which were expected to become important did not (traffic congestions, noise), and still others remained unchanged (recognition of the town, more and better jobs). These

results suggest that the stages of a project's development such as the land acquisition phase and the construction phase may have less consistent impacts on support for the Exposition than does the innovation process itself in which the individual formulates and then seeks to confirm his or her opinions. Thus, we might expect support for the Exposition to undergo fewer fluctuations, and expect change in overall support or opposition to occur gradually over the life of the project.

If the phases of the project are important in determining attitude, the impacts hypothesized to be related to the construction phase of the Exposition may not have manifested themselves significantly enough to affect support for the Exposition. It could be argued that in the current study impacts such as traffic congestion due to construction were physically removed from the site and had begun before 1980. Other impacts, because of the size and location of the construction area, may have been fewer or less extensive than anticipated. These would include air pollution, noise, and parking problems.

Perceived participation in decisions concerning the Exposition was a significant predictor of support for the Exposition in both years of the survey. In 1979 several referendum issues were before the Knoxville community and the salience of these issues made the results entirely expected. As was expected, by 1980 the Exposition preparations were well underway. Ninety-six percent of the sample believed the Exposition would occur. The hypothesis that the perceived ability to participate in decision regarding the Exposition would decrease turned out to be

well-based and was confirmed. However, it was also hypothesized that since the city was clearly committed to the Exposition, and the referendum issue moot, decision participation would be less important in the prediction of support for the Exposition. This was not the case. The correlation between decision participation and support for the Exposition remained unchanged from 1979 to 1980. Clearly, the ability to participate in the decision to innovate is important in supporting a collective or authority directed innovation. More importantly, however, the opportunity to participate apparently has relatively long-lasting effects in terms of supporting the innovation. Even after the development of the Exposition had progressed beyond the point where it could easily be halted, the inability to participate through a referendum adversely affected attitude toward the Exposition.

The final hypothesis of the current study dealt with adopter categories, and an attempt to confirm distinctions between early supporters and recent supporters and between long-term opponents and recent opponents. This analysis was important in testing the utility of innovation diffusion concepts and of applying the innovation process to a planned community change. The exploratory discriminant analysis was successful in discriminating among the four groups. The first discriminant function extracted discriminated between supporters and opponents of the Exposition. The significance of this function was not unexpected. The significance of this function alone, however, cannot be considered sufficient support for adopter categories. The critical distinctions which must be made are within the group of supporters, specifically

between recent supporters and long-term supporters for the Exposition. Likewise the distinction between recent opponents and long-term opponents is equally critical. The significance of the second and third functions in the discriminant analysis support these distinctions. Perceived opposition and perceived support each served to discriminate between recent supporters and long-term supporters and between recent opponents and long-term opponents.

The success of the discriminant analysis in identifying different groups of supporters and opponents of the Exposition supports the suitability of innovation diffusion theory in explaining change across time. What has been termed the adopter perspective (Brown, 1981) describes the change in support of an innovation in terms of adopter categories. Clearly, a replication of this effect would be highly desirable.

Conclusion

In the present study, innovation diffusion theory has been shown to provide a useful framework for investigating the development of large-scale community projects such as the 1982 World's Energy Exposition. The usefulness of innovation diffusion theory is not limited to the World's Energy Exposition. In terms of the community, the Exposition is not unlike any large scale development which precipitates community change. As such, innovation diffusion theory can be expected to contribute to the understanding of a broad range of community changes, including energy-related developments such as nuclear power plant

construction, and water impoundment programs, which have been investigated by techniques established in social impact assessment. At least one instance of such a use of innovation diffusion theory can be found in Mazur (1975), where he compared a nuclear power plant and opposition to its construction to the issue of fluoridation in terms of innovation diffusion theory. Mazur compared the construction of a nuclear power plant to a technological innovation. To the present author's knowledge this is the only other case of considering the support of large scale social changes in light of innovation diffusion theory.

Innovation diffusion theory also allows us to emphasize the process of change, an area generally excluded in social impact assessment. Similarly excluded from social impact assessment is the emphasis on the individual, and the emphasis on understanding the variables involved in determining a community's stand on such a change. Innovation diffusion theory allows us to address these issues in a conceptually appropriate manner. Specifically, we are in a position to identify the factors influencing community support for an innovation. Because innovation diffusion theory takes a longitudinal perspective, we are also able to begin addressing such issues as change over time. It should be mentioned that several of these issues have been addressed by the expectancy model of Fishbein and Ajzen (1975), and have recently been utilized in understanding attitude toward nuclear power construction (Bowman & Fishbein, 1978; Woo & Castore, 1980).

The results of the present study also have several implications for public policy. One consistent variable affecting support for a planned

innovation in the community was participation in decisions regarding the change. Clearly, if public officials want the public to endure and, hopefully, endorse community change, they must allow for public participation. Secondly, at least in regards to the current study, knowledge of a proposed change is not sufficient to influence support. Knowledge may only be useful in the earliest stages of public awareness of the proposed change. In the current study, as early as 1979 knowledge had already lost any importance it had as a determinant of support. Finally, in regard to public policy, it is apparent that such individual characteristics as cosmopolitanism and general attitude toward change play a less important role than do the perceived characteristics of the innovation itself. Rural communities and other close-knit communities which possess localist values and Gemeinschaft relationships such as described by Toennies (1957) may be no more likely to reject an innovation than larger more cosmopolitan communities. What may be important are specific characteristics of the innovation such as the risk, advantage and observability of its effects on the community. Further, the simple perceived probabilities of these effects or outcomes seem to be important only in the absence of observable results. Once the effects of an innovation become apparent, and are beginning to be felt and seen, the likelihood of such outcomes appear to be less important and less meaningful than how apparent they are. For purposes of public policy, increasing the conspicuousness or salience of positive effects of a change as they become manifest may accomplish more than merely fostering the belief that such effects will occur.

Innovation diffusion theory also allows us to bring a different perspective to social impact assessment and public policy. From the perspective of innovation diffusion theory, a development or planned change is no longer seen as something which impacts on the community, but rather as an innovation which the community should have rights to accept or reject. If we can shift the emphasis of decision to the community we can take the first step towards placing power over the community within the community, a goal which has been stressed in the field of community psychology by several authors (Heller & Monahan, 1977; Rappaport, 1977). By considering a planned community change an innovation, we are brought closer to recognizing the legitimate right of the community, and individuals or groups within the community, to adopt or reject the proposed innovation.

Limitations of the Study

One of the major limitations of the present study was the inability to investigate innovation concepts more thoroughly in the 1979 survey. The 1979 survey addressed the issues of support for the Exposition and the perception of impacts associated with the Exposition. The survey did not address the observability, risk, or advantage of impacts, however, nor did it address innovator characteristics such as cosmopolitanism or attitude toward change. The survey in 1980 was specifically structured to address the question of innovation diffusion's utility in explaining support for the Exposition by the inclusion of these items. If the 1979 survey had been similarly structured, not only would we have

been able to more fully investigate changes over time in regard to innovation theory, but also would have been able to study and compare two distinct stages of the innovation process.

Additionally, there is some indication that a survey conducted even earlier in the Exposition's development would yield valuable information by providing data on the earliest stage of the project's development. Such a survey, however, if it were planned in conjunction with later surveys should have been administered two years before the beginning of construction, which is a full four years before the scheduled opening of the Exposition.

A second limitation of the present study involves self-selection effects in producing the panel. In the study respondents were asked to indicate if they were willing to participate in future studies. Of the 144 who so indicated in 1979, 114 were successfully interviewed. The remainder refused on being recontacted or could not be located. As a result, both differential mortality and self-selection could limit generalizability from the panel (Cook & Campbell, 1979). The lack of significant differences between the panel and the remaining respondents on several important dimensions is reassuring. It is not feasible, however, to test or control for every variable of conceivable importance.

Implications for Future Research

The current study was one of the first attempts to analyze the usefulness of a innovation diffusion theory in accounting for support

for the World's Energy Exposition. Clearly, future studies are necessary to test the applicability of innovation diffusion theory to different projects over time. One of the strengths of the innovation diffusion model is its attention to the innovation process and change over time. Therefore, innovation diffusion theory should be particularly fruitful in the traditional realm of social impact assessment which has suffered from both a lack of a systematic approach to investigating issues and a lack of a longitudinal perspective in addressing present and future concerns (Finsterbusch, 1977).

Future studies of the Exposition would also benefit from the inclusion of several additional social impacts. The 1980 survey included twenty-three social impacts used in the analysis of support for the Exposition. There were several social impacts which were overlooked when developing the survey but which later received attention in the public media. These included price gouging, evictions, cultural attractions, and negative publicity for the city. The observability, risk and advantages associated with these social impacts may have predicted support for the Exposition also.

Further investigation of the diffusion effect in the realm of public policy should be undertaken to determine the usefulness of concepts such as the bandwagon effect, and differences in innovation decisions. The ability to predict the growing antinuclear sentiment, or the support for alternative energy systems, for example, would be of tremendous value for purposes of public policy.

Another direction for research involves the comparison of innovation diffusion theory to a second theory being researched in the fields of

social impact assessment and public policy--the expectancy theory of Fishbein and Ajzen (1975). These two theories have several similarities, including their reliance on perceived effects or outcomes and their ultimate interest in predicting behavior. Both theories also provide a perspective which would allow for a consistent perspective in research on social issues and change. They differ in how explicitly they describe the relationship between perceived effects and subsequent behavior. They also differ in their emphasis on the individual, where expectancy theory deals only with the individual's perceptions, innovation diffusion theory also encompasses higher system level variables such as the innovation's stage of development in a community and the innovation-decision process for a social group. If both theories could be tested longitudinally in one project, we would be in an excellent position to ascertain their strengths and integrate them into a perspective tailored to the unique needs of the study of psychology in the community and in the social policy arena.

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APPENDIXES

APPENDIX A

THE UNIVERSITY OF TENNESSEE



COLLEGE OF LIBERAL ARTS
DEPARTMENT OF PSYCHOLOGY

Knoxville, TN. 37916
615-974-2531

Hello, my name is _____ and I'm working with the Department of Psychology at the University of Tennessee. You were selected at random from all the residents of Knoxville to participate in this city-wide survey of community issues. We are particularly interested in your opinions about EXPO 82. May I ask you some questions today about these issues.

APPENDIX B

THE UNIVERSITY OF TENNESSEE



COLLEGE OF LIBERAL ARTS
DEPARTMENT OF PSYCHOLOGY

Knoxville, TN 37916
615-974-2531

Dear Knoxville Resident:

The Social Impact Assessment Team connected with the Department of Psychology of the University of Tennessee is conducting a city wide survey concerning the attitudes and opinions of city residents toward the 1982 International Energy Exposition (EXPO 82).¹ Your residence has been selected at random to be included in our sample. The survey itself consists of questions concerning your expectations of potential benefits and problems of EXPO 82, your attitudes toward EXPO 82, and your satisfaction with services and perceptions of the quality of life in the community.

We are interested in your opinions and, therefore, there are no correct or incorrect answers. If you do agree to participate in this survey you are not obligated to answer any question you feel is inappropriate and you may discontinue the interview at any time. As we are interested in the opinions of residents of the city in general, your name and address will not be associated with your answers and all information obtained will remain strictly confidential. Your signature below will signify only that you have agreed to participate in this survey and will serve as a release if the results of this survey merit publication. If you have any questions feel free to ask or you may call the number below:

Dr. John W. Lounsbury
Department of Psychology
University of Tennessee
974-3423

Tom Massey
Department of Psychology
University of Tennessee
974-6782

I hereby agree to participate in the survey described above:

Signature: _____ Date: _____

¹The Social Impact Assessment Team is not associated with any public or private group except those stated above.

APPENDIX C

1. 1. I'm going to read to you a number of services which are available in most cities. I'd like you to tell me if you are Very Satisfied, Satisfied, Neutral, Dissatisfied, or Very Dissatisfied with each service in Knoxville. The first service is

5. For each of the pairs of words I'm going to read to you I want you to rate on a 7 point scale how you feel about Knoxville. For example, the first pair of words are Private vs. Not Private. If 1 is Private and 7 is Not Private, how would you rate Knoxville overall.

[illegible]

-2-

6. What best describes your general feelings about Knoxville as a place to live?

1	2	3	4	5	6	7
Excellent	Very Good	Good	Average	Poor	Very Poor	Terrible

7. Below is a picture of a ladder. Suppose we say that the top of the ladder represents the best possible life for you and that the bottom represents the worst possible life for you.

a) Where on the ladder do you think you will be <u>5 years from now</u> ?	10	Best Possible Life
Step Number _____	9	
b) Where on the ladder would you say you stood <u>5 years ago</u> ?	8	
Step Number _____	7	
c) Where on the ladder do you feel you personally stand at the <u>present time</u> ?	6	
Step Number _____	5	
	4	
	3	
	2	
	1	
	0	Worst Possible Life

8. How do you feel about your life as a whole?

7	6	5	4	3	2	1
Delighted	Pleased	Mostly Satisfied	Mixed	Mostly Dissatisfied	Unhappy	Terrible

One current community issue concerns the proposed 1982 International Energy Exposition. EXPO 82.

9. Here are some questions concerning EXPO 82 specifics. It's not expected that everyone will know all the answers so for those you don't know, give your best estimate.

a) How long will EXPO 82 last? _____

b) Where will the EXPO site be located? (ask for specifics) _____

W R

- c) Would you say that Mayor Randy Tyree is a supporter, is neutral, or is an opponent of EXPO?

Supporter Neutral Opponent DK/NR

- d) Has the City of Knoxville appropriated funds for EXPO?

Yes No DK/NR

- e) Has the State of Tennessee appropriated funds for EXPO?

Yes No DK/NR

- f) Has the Federal government appropriated funds for EXPO?

Yes No DK/NR

Now I'm going to read a question with several alternative answers. Please choose the best answer.

- g) Who is in charge of buying the land for the EXPO site? Is it . . .

1) Private businesses and developers
 2) Knoxville Community Development Corporation (KCDC)
 3) State of Tennessee
 4) Knoxville International Energy Exposition Corporation (KIEE)
 5) City of Knoxville
 6) Citizens for a Better Knoxville

-3-

- b) Who will own the EXPO site? Will it be . . .
- 1) Private businesses and developers
 - 2) Knoxville Community Development Corporation (KCDC)
 - 3) State of Tennessee
 - 4) Knoxville International Energy Exposition Corporation (KIEEC)
 - 5) City of Knoxville
 - 6) Citizens for a Better Knoxville
10. I'm going to read to you the major sources of information in Knoxville. I'd like for you to tell me if each source of information is Very Important, Important, Neutral, Unimportant, or Very Unimportant to you personally. The first source of information is . . .

	Very Important	Important	Neutral	Unimportant	Very Unimportant
a) Local Newspapers	1	2	3	4	5
b) Local Radio	1	2	3	4	5
c) Friends and Acquaintances	1	2	3	4	5
d) TV	1	2	3	4	5
e) Co-workers	1	2	3	4	5
f) Meetings, Ballies	1	2	3	4	5
g) Groups, Clubs, Organizations	1	2	3	4	5
h) Church	1	2	3	4	5
i) Other (Specify _____)	1	2	3	4	5

11. Do you think that the publicity about EXPO has been good for Knoxville?
- Yes No DK/NR
12. In your opinion what benefits will EXPO bring about before and during the exposition? _____
- _____
- _____
13. In your opinion what benefits will EXPO bring about after the exposition? _____
- _____
- _____
14. In your opinion what problems will EXPO cause before and during the exposition? _____
- _____
- _____
15. In your opinion what problem will EXPO cause after the exposition? _____
- _____
- _____
16. Next I'd like to ask you some questions about community change and EXPO. If EXPO comes to Knoxville a number of things in the community might change. I'm going to read you a list of things that could happen. Referring to Roman Numeral 1, please tell me how likely each of these changes are. The first potential change is Downtown Revitalization. Is it (read alternatives).

	Certain to Happen	Very Likely	Likely	Perhaps	Unlikely	Very Unlikely	Impossible to Happen
a) Downtown revitalization	1	2	3	4	5	6	7
b) Bigger city atmosphere	1	2	3	4	5	6	7
c) Increased traffic congestion	1	2	3	4	5	6	7
d) More public entertainment (bowling, theatres, restaurants)	1	2	3	4	5	6	7
e) More stores and shopping areas	1	2	3	4	5	6	7
f) Increased business	1	2	3	4	5	6	7

-4-

	Certain to Happen	Very Likely	Likely	Perhaps	Unlikely	Very Unlikely	Impossible to Happen
g) Increased noise	1	2	3	4	5	6	7
h) Increased tourism	1	2	3	4	5	6	7
i) More and better jobs	1	2	3	4	5	6	7
j) Increase in undesirables	1	2	3	4	5	6	7
k) Housing shortages	1	2	3	4	5	6	7
l) Increased land values	1	2	3	4	5	6	7
m) Increased crime	1	2	3	4	5	6	7
n) Improved mass transit	1	2	3	4	5	6	7
o) State, national & inter- national recognition of town	1	2	3	4	5	6	7
p) Increased taxes	1	2	3	4	5	6	7
q) Increase in visitors from foreign countries	1	2	3	4	5	6	7
r) Parking problems	1	2	3	4	5	6	7
s) Increase in city size	1	2	3	4	5	6	7
t) Downtown parks	1	2	3	4	5	6	7
u) Improved energy capital	1	2	3	4	5	6	7
v) Improved community spirit	1	2	3	4	5	6	7

17. Suppose that some of these things were to happen in Knoxville if EXPO comes. Referring to Roman Numeral II please tell me how desirable or undesirable each would be to you. How desirable is it to have . . . (read each time)

	Extremely Undesirable	Undesirable	Undesirable	Neutral	Desirable	Very Desirable	Extremely Desirable
a) More public entertainment (bowling, theaters, restaurants)	1	2	3	4	5	6	7
b) More stores and shopping areas	1	2	3	4	5	6	7
c) Increased tourism	1	2	3	4	5	6	7
d) Increased land values	1	2	3	4	5	6	7
e) State, national & inter- national recognition of town	1	2	3	4	5	6	7
f) Increase in visitors from foreign countries	1	2	3	4	5	6	7
g) Bigger city atmosphere	1	2	3	4	5	6	7
h) Increase in city size	1	2	3	4	5	6	7

18. Some changes can be called desirable or undesirable. Listed below are some changes of varying importance to Knoxville. Referring to Roman Numeral III please tell me how important or unimportant each change would be to you. How important is . . . to you. (read each time)

	Extremely Unimportant	Unimportant	Unimportant	Neutral	Important	Very Important	Extremely Important
a) Downtown revitalization	1	2	3	4	5	6	7
b) Increased traffic congestion	1	2	3	4	5	6	7
c) More and better paying jobs	1	2	3	4	5	6	7
d) Increased business	1	2	3	4	5	6	7
e) Increased noise	1	2	3	4	5	6	7
f) Crowding in schools	1	2	3	4	5	6	7
g) Increase in undesirables	1	2	3	4	5	6	7
h) Housing shortages	1	2	3	4	5	6	7
i) Increased crime	1	2	3	4	5	6	7
j) Increased taxes	1	2	3	4	5	6	7
k) Improved mass transit	1	2	3	4	5	6	7
l) Parking problems	1	2	3	4	5	6	7
m) Downtown parks	1	2	3	4	5	6	7
n) Improved community spirit	1	2	3	4	5	6	7

Now I would like to ask you a few questions concerning your opinion of EXPO.

- II. 1. Do you think you have a great deal of influence, some influence, very little influence or no influence on the decisions concerning EXPO?
- Great Deal Some Very Little None
2. Do you think EXPO 82 involves a conflict between the interests of business and the interests of the public as a whole?
- Yes No DK/NR
3. Do you think EXPO 82 involves a conflict between local government and the interests of the public as a whole?
- Yes No DK/NR

-5-

4. Up until now what have you done to express your opinions on EXPO 82? (circle those indicated by respondent as you read them) Have you . . .

- a) discussed feelings with family or friends
- b) talked with strangers to convince them of your view
- c) attended a public meeting on EXPO
- d) contacted a government official by letter or phone
- e) signed a petition
- f) solicited support from the business community
- g) donated money to an organization
- h) volunteered time to an organization
- i) written a letter to a newspaper or magazine
- j) anything else (specify) _____

5. Are you a member of any groups, clubs, or voluntary associations that have taken a stand on EXPO 82?

NO

YES

- b) Could you give me their names and their stand?

- | | | |
|----------|-----|-----|
| 1) _____ | Pro | Con |
| 2) _____ | Pro | Con |
| 3) _____ | Pro | Con |
| 4) _____ | Pro | Con |
| 5) _____ | Pro | Con |

6. Under what conditions, if any, will EXPO make you leave this area? _____

7. Are you in favor of a referendum concerning Knoxville as a site for EXPO 82?

Yes NO DK/NR

8. If a referendum were held today concerning Knoxville as the site for EXPO 82 would you:

- a) vote in support of Knoxville as the EXPO 82 site, or
- b) vote against Knoxville as the EXPO 82 site, or
- c) would you not vote?

9. Do you think a referendum will be held concerning Knoxville as the site for EXPO 82?

Yes No DK/NR

10. Are you in favor of a referendum concerning city funding for EXPO 82?

Yes No DK/NR

11. If a referendum were held today concerning city funding for EXPO 82 would you:

- a) vote in support of city funding for EXPO 82, or
- b) vote against city funding for EXPO 82, or
- c) would you not vote?

12. Do you think a referendum will be held concerning city funding for EXPO 82?

Yes No DK/NR

13. If it were up to you alone, would you allow EXPO 82 to be held in Knoxville?

Yes NO DK NR

14. Do you think EXPO 82 will happen?

Yes No DK NR

To conclude this interview I'd like to ask you a few questions about yourself.

- III. 1. How many years have you lived in the Knoxville area? _____

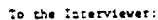
2. Are you buying or renting your residence?

Own Rent

3. Do you own (any other) property in the city or county?

Yes No NR

- Since the issues we talked about today are important to Knoxville we hope to continue to gather information concerning these issues. With this in mind would you consider being included in the next interview to occur not sooner than a year from now.



Sex: M F
Race: W B Other _____
Name of Interviewer: _____
Date of Interview: _____

APPENDIX D

A Survey of Community Issues

First, I'd like to ask you a few questions about your feelings toward our community.

1. I'm going to read to you a number of services which are available in most cities. I'd like you to tell me if you are Very Satisfied, Satisfied, Neutral, Dissatisfied, or Very Dissatisfied with each service in Knoxville. The first service is

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
a) Fire Protection	1	2	3	4	5
b) Telephone Service	1	2	3	4	5
c) Zoning Laws	1	2	3	4	5
d) Availability of Housing	1	2	3	4	5
e) Streets and Highways	1	2	3	4	5
f) Police Protection	1	2	3	4	5
g) City Government	1	2	3	4	5
h) Cultural Attractions	1	2	3	4	5
i) City Parks/Playgrounds	1	2	3	4	5
j) School System	1	2	3	4	5
k) City Recreational Facilities	1	2	3	4	5
l) Public Transportation	1	2	3	4	5

2. Do you think your city government gives you your money's worth in services? Yes No DK/NR
3. Do you think your city government is responsive to people like you? Yes No DK/NR
4. a) Do you think that voting is the only way you have any say about the way the city government runs things, or are there lots of ways?

Lots of Ways Some Ways Voting Only Way No Way to Have a Say Refused/NA

Other _____

- b) Do you consider yourself a Democrat, a Republican or an Independent?
- Democrat Republican Independent DK/NR
- c) Do you consider yourself a conservative, a moderate, or a liberal?
- Conservative Moderate Liberal DK/NR
5. What best describes your general feelings about Knoxville as a place to live?

1 2 3 4 5 6 7

Excellent Very Good Good Average Poor Very Poor Terrible

6. Below is a picture of a ladder. Suppose we say that the top of the ladder represents the best possible life for you and that the bottom represents the worst possible life for you.

- a) Where on the ladder do you think you will be 5 years from now?

Step Number _____

- b) Where on the ladder would you say you stood 5 years ago?

Step Number _____

- c) Where on the ladder do you feel you personally stand at the present time?

Step Number _____

10	Best Possible Life
9	
8	
7	
6	
5	
4	
3	
2	
1	
0	Worst Possible Life

-2-

7. How do you feel about your life as a whole?

7 6 5 4 3 2 1
 Delighted Pleased Mostly Satisfied Mixed Mostly Dissatisfied Unhappy Terrible

8. As I read each of the following statements, please refer to Roman Numeral I and tell me whether you agree or disagree with it. For example . . . (read statement 8a) Do you: strongly disagree; disagree; slightly disagree; slightly agree; agree or strongly agree?

a) The most rewarding organizations a person can belong to are local clubs and associations rather than larger nation-wide organizations.

Strongly Disagree Disagree Slightly Disagree Slightly Agree Agree Strongly Agree

b) Despite all the newspaper and TV coverage, national and international happenings rarely seem as interesting as events that occur right in the local community in which one lives.

Strongly Disagree Disagree Slightly Disagree Slightly Agree Agree Strongly Agree

c) No doubt many newcomers to the community are capable people; but when it comes to choosing a person for a responsible position in the community, I prefer a man whose family is well established in the community.

Strongly Disagree Disagree Slightly Disagree Slightly Agree Agree Strongly Agree

d) Big cities may have their place but the local community is the backbone of America.

Strongly Disagree Disagree Slightly Disagree Slightly Agree Agree Strongly Agree

e) I have greater respect for a man who is well-established in his local community than a man who is widely known in his field but who has no local roots.

Strongly Disagree Disagree Slightly Disagree Slightly Agree Agree Strongly Agree

One current community issue concerns the proposed 1982 International Energy Exposition, EXPO 82.

9. Here are some questions concerning EXPO 82 specifics. It's not expected that everyone will know all the answers so for those you don't know, give your best estimate.

a) How long will EXPO 82 last? _____

b) Where will the EXPO site be located? (ask for specifics) _____

W R

c) Would you say that Mayor Randy Tyree is a supporter, is neutral, or is an opponent of EXPO?

Supporter Neutral Opponent DK/NR

d) Has the City of Knoxville appropriated funds for EXPO?

Yes No DK/NR

e) Has the State of Tennessee appropriated funds for EXPO?

Yes No DK/NR

f) Has the Federal government appropriated funds for EXPO?

Yes No DK/NR

Now I'm going to read a question with several alternative answers. Please choose the best answer.

g) Who is in charge of buying the land for the EXPO site? It is . . .

- 1) Private businesses and developers
- 2) Knoxville Community Development Corporation (KCDC)
- 3) State of Tennessee
- 4) Knoxville International Energy Exposition Corporation (KIEE)
- 5) City of Knoxville
- 6) Citizens for a Better Knoxville

-3-

h) Who will own the EXPO site? Will it be . . .

- 1) Private businesses and developers
- 2) Knoxville Community Development Corporation (KCDC)
- 3) State of Tennessee
- 4) Knoxville International Energy Exposition Corporation (KIEEC)
- 5) City of Knoxville
- 6) Citizens for a Better Knoxville

10. How important to you is EXPO and the controversy surrounding it?

1	2	3	4	5	6	7
Extremely Important	Very Important	Important	Neutral	Unimportant	Very Unimportant	Extremely Unimportant

11. When you want to know something about EXPO 82, what sources of information do you rely on?

_____ 1st Source

_____ 2nd Source

_____ 3rd Source

12. Do you think that the publicity about EXPO has been good for Knoxville?

Yes No DK/NR

13. Now I'd like to ask you some questions about the potential results of EXPO. Do you think EXPO has been good or bad for Knoxville so far? (Place a "1" over the selection.) What would your answer have been a year ago? (Place a "2" over selection.)

Very Good	Somewhat Good	Mixed	Somewhat Bad	Very Bad
-----------	---------------	-------	--------------	----------

14. In the long run, do you think EXPO will be good or bad for Knoxville? (Place a "1" over selection.) What would your answer have been a year ago? (Place a "2" over selection.)

Very Good	Somewhat Good	Mixed	Somewhat Bad	Very Bad
-----------	---------------	-------	--------------	----------

15. In your opinion what benefits will EXPO bring about before and during the exposition?

16. What benefits will EXPO bring about after the exposition?

17. In your opinion what problems will EXPO cause before and during the exposition?

18. What problem will EXPO cause after the exposition?

19. Which are most important: _____ 1 Short term or immediate results of EXPO.

_____ 2 Long term results of EXPO.

(3) Both are equally important.

(4) DK/NR

20. If the decision were made this week to cancel EXPO 82, how satisfied would you be with the decision?

1	2	3	4	5	6	7
Extremely Satisfied	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Extremely Dissatisfied

21. How much change do you think will occur as a result of EXPO?

A Lot Some A Little None DK/NR

22. Next, I'd like to ask you some questions about community change and EXPO. If EXPO comes to Knoxville a number of changes could occur. Referring to Roman Numeral II, please tell me whether or not this change has occurred. If it has not, tell me how likely it is to occur, and if it has happened, how apparent is it?

	Very Apparent	Apparent	Somewhat Unapparent	Not At All Apparent	Already Happening	Certain To Happen	Very Likely	Likely	Perhaps	Unlikely	Very Unlikely	Impossible To Happen
a) Downtown revitalization	4	3	2	1	—	1	2	3	4	5	6	7
b) Bigger city atmosphere	4	3	2	1	—	1	2	3	4	5	6	7
c) Increased traffic congestion	4	3	2	1	—	1	2	3	4	5	6	7
d) More public entertainment	4	3	2	1	—	1	2	3	4	5	6	7
e) More stores and shopping areas	4	3	2	1	—	1	2	3	4	5	6	7
f) Increased business	4	3	2	1	—	1	2	3	4	5	6	7
g) Increased noise	4	3	2	1	—	1	2	3	4	5	6	7
h) Increased tourism	4	3	2	1	—	1	2	3	4	5	6	7
i) More and better jobs	4	3	2	1	—	1	2	3	4	5	6	7
j) Increase in undesirable people	4	3	2	1	—	1	2	3	4	5	6	7
k) Housing shortages	4	3	2	1	—	1	2	3	4	5	6	7
l) Increased land values	4	3	2	1	—	1	2	3	4	5	6	7
m) Increased crime	4	3	2	1	—	1	2	3	4	5	6	7
n) Improved mass transit	4	3	2	1	—	1	2	3	4	5	6	7
o) State, national & international recognition of town	4	3	2	1	—	1	2	3	4	5	6	7
p) Increased taxes	4	3	2	1	—	1	2	3	4	5	6	7
q) Increase in visitors from foreign countries	4	3	2	1	—	1	2	3	4	5	6	7
r) Parking problems	4	3	2	1	—	1	2	3	4	5	6	7
s) Increase in city size	4	3	2	1	—	1	2	3	4	5	6	7
t) Downtown parks	4	3	2	1	—	1	2	3	4	5	6	7
u) Important energy capital	4	3	2	1	—	1	2	3	4	5	6	7
v) Improved community spirit	4	3	2	1	—	1	2	3	4	5	6	7
w) Air pollution	4	3	2	1	—	1	2	3	4	5	6	7

23. As I read each item please refer to Roman Numeral III and tell me whether each phrase describes the change I name. Answer yes if it does describe this change, no if it does not, and unsure if you can't decide. The first possible change is Downtown revitalization. Do you believe this potential change is of some personal advantage or benefit to you? (yes, no, can't decide) Is this an important issue to you? Is it risky or potentially hazardous to you? Is it an advantage to the city as a whole?

	Personal Advantage	Personally Important	Risky or Hazardous	General Advantage
a) Downtown revitalization	Y N ?	Y N ?	Y N ?	Y N ?
b) Bigger city atmosphere	Y N ?	Y N ?	Y N ?	Y N ?
c) Increased traffic congestion	Y N ?	Y N ?	Y N ?	Y N ?
d) More public entertainment	Y N ?	Y N ?	Y N ?	Y N ?
e) More stores and shopping areas	Y N ?	Y N ?	Y N ?	Y N ?
f) Increased business	Y N ?	Y N ?	Y N ?	Y N ?
g) Increased noise	Y N ?	Y N ?	Y N ?	Y N ?
h) Increased tourism	Y N ?	Y N ?	Y N ?	Y N ?
i) More and better jobs	Y N ?	Y N ?	Y N ?	Y N ?
j) Increase in undesirable people	Y N ?	Y N ?	Y N ?	Y N ?
k) Housing shortages	Y N ?	Y N ?	Y N ?	Y N ?
l) Increased land values	Y N ?	Y N ?	Y N ?	Y N ?
m) Increased crime	Y N ?	Y N ?	Y N ?	Y N ?
n) Improved mass transit	Y N ?	Y N ?	Y N ?	Y N ?
o) State, national and international recognition of town	Y N ?	Y N ?	Y N ?	Y N ?
p) Increased taxes	Y N ?	Y N ?	Y N ?	Y N ?
q) Increase in visitors from foreign countries	Y N ?	Y N ?	Y N ?	Y N ?
r) Parking problems	Y N ?	Y N ?	Y N ?	Y N ?
s) Increase in city size	Y N ?	Y N ?	Y N ?	Y N ?
t) Downtown parks	Y N ?	Y N ?	Y N ?	Y N ?
u) Important energy capital	Y N ?	Y N ?	Y N ?	Y N ?
v) Improved community spirit	Y N ?	Y N ?	Y N ?	Y N ?
w) Air pollution	Y N ?	Y N ?	Y N ?	Y N ?

24. When it comes to community change, which statement best describes your feeling?

- ☐ A. The only way to make things better is to change them.
☐ B. A few bad ideas come along, but most changes are for the better.
☐ C. Most changes are for the worse, even though a few good ideas do come along.
☐ D. Changing things just makes problems worse.

-5-

25. When it comes to trying new things in general, are you:
- ☐ A. One of the first to try something new.
- ☐ B. Willing to try something as soon as a few friends have.
- ☐ C. Willing to try something only after its proved popular by a majority.
- ☐ D. One of the very last to try new things out.
11. 1. Now I would like to ask you a few questions concerning your opinion of EXPO. Do you think you have a great deal of influence, some influence, very little influence or no influence on the decisions concerning EXPO?
- Great Deal Some Very Little None
2. Do you think EXPO 82 involves a conflict between the interests of business and the interests of the public as a whole?
- Yes No DK/NR
3. Do you think EXPO 82 involves a conflict between local government and the interests of the public as a whole?
- Yes No DK/NR
4. What percentage of Knoxville residents would you say supports, opposes, and is undecided about EXPO 82?
- Supports _____ Opposes _____ Is Undecided _____
5. How much change will come about in Knoxville as a result of EXPO 82?
- A Lot Some Very Little None
6. Have you or your immediate family directly benefited from EXPO? For example by selling land or being employed in an EXPO related position?
- Yes No DK/NR
- If yes, how? _____
7. Have you or your immediate family suffered direct inconveniences as a result of EXPO? For example by being evicted from a home or business?
- Yes No DK/NR
- If yes, how? _____
8. a) Are you in favor of a referendum concerning Knoxville as a site for EXPO 82?
- Yes No DK/NR
- b) If a referendum were held today concerning Knoxville as a site for EXPO 82, would you:
1. vote in support of Knoxville as the EXPO 82 site, or
2. vote against Knoxville as the EXPO 82 site, or
3. would you not vote?
- c) Do you think a referendum will be held concerning Knoxville as the site for EXPO 82?
- Yes No DK/NR
- d) Are you in favor of a referendum concerning city funding for EXPO 82?
- Yes No DK/NR
- e) If a referendum were held today concerning city funding for EXPO 82, would you:
1. vote in support of city funding for EXPO 82, or
2. vote against city funding for EXPO 82, or
3. would you not vote?
- f) Do you think a referendum will be held concerning city funding for EXPO 82?
- Yes No DK/NR
9. How important is the referendum issue in determining your present feelings about EXPO? (Place a "1" over the selection.) What would your answer have been one year ago? (Place a "2" over the selection.)
- 1 1 1 1 1 1 1
- Very Important Important Somewhat Important Neutral Somewhat Unimportant Unimportant Very Unimportant
10. If it were up to you alone, would you allow EXPO 82 to be held in Knoxville? (Place a "1" over the selection.) What would your answer have been one year ago? (Place a "2" over the selection.)
- 1 1 1 1 1
- Definitely Yes Probably Yes Undecided Probably No Definitely No

- Since the issues we talked about today are important to Knoxville we hope to continue to gather information concerning these issues. With this in mind would you consider being included in the next interview to occur not sooner than a year from now? (Record name, address and phone number on separate sheet.)

Sex: M F
Race: W B Other _____
Name of Interviewer: _____
Date of Interview: _____
Census Tract No.: _____
Block Number: _____

APPENDIX E

Table E-1
Correlation Matrix of Items Measuring
Cosmopolitanism

	A*	B	C	D
B	.245			
C	.353	.318		
D	.346	.293	.40	
E	.346	.445	.427	.384

*A = "The most rewarding clubs are local clubs."

B = "Local events are the most interesting events."

C = "Local people are the best people."

D = "The local community is the backbone of America."

E = "I have greatest respect for the local man."

Note: All coefficients are significant at $p < .01$.

Table E-2

Means, Standard Deviations and Ranges for Independent Variables
Used in the Prediction of Support for the Exposition

Variable	Mean	Standard Deviation	Range
Decision participation	3.76	1.63	4
Attitude toward community change	1.85	.73	4
Attitude toward general change	1.99	.97	4
Cosmopolitanism	.32	3.44	5
Level of education	12.44	2.62	15
Perceived influence in Expo decisions	3.58	.67	3
Risk of business development	1.47	.53	2
Risk of social disruptions	2.41	.47	2
Observability of business development	1.43	.52	3
Observability of social disruptions	1.84	.60	3
Personal advantage of business development	2.18	.58	2
Personal advantage of social disruptions	2.85	.33	2
General advantage of business development	1.42	.43	2
General advantage of social disruptions	2.85	.29	2

Note: Means and standard deviation are based on a sample of 238.

Table E-3

Loadings of Social Impacts on Factors of Personal Advantage

Variable	Business Development Personal Advantage	Social Disruption Personal Advantage
Downtown revitalization	.362	-.046
Bigger city atmosphere	.395	.000
More public entertainment	.595	.074
More stores	.566	.100
Increased business	.352	.022
Increased tourism	.312	.010
More and better jobs	.503	-.008
Improved mass transit	.636	-.004
Recognition of the town	.260	.167
Increase in foreign visitors	.254	.258
Increased city size	.350	.206
Downtown parks	.572	.152
Creation of energy capital	.259	.105
Improved community spirit	.489	.000
Increased traffic congestion	.037	.447
Increased noise	.066	.353
Increase in undesirables	.127	.578
Housing shortages	.101	.464
Increased crime	.078	.848
Increased taxes	.029	.637
Parking problems	.071	.711
Air pollution	-.029	.553
Increased land value*	.071	.111

*Item deleted to increase reliability.

Table E-4

Loadings of Social Impacts on Factors of Risk

Variable	Business Development Risk	Social Disruption Risk
Downtown revitalization	.418	.074
Bigger city atmosphere	.208	.187
More entertainment	.718	.082
More stores	.785	.031
Increased business	.691	-.018
Increased tourism	.422	.289
More and better jobs	.705	-.172
Increased land values	.419	.085
Improved mass transit	.611	-.168
Recognition of the city	.659	.053
Increased foreign visitors	.412	.216
Downtown parks	.536	.091
Creation of an energy capital	.414	.106
Improved community spirit	.378	-.166
Increased traffic congestion	.002	.568
Increased noise	.077	.581
Increase in undesirables	-.134	.588
Housing shortages	.257	.280
Increased crime	-.195	.702
Increased taxes	.124	.410
Parking problems	.140	.542
Increased city size	.274	.341
Air pollution	-.018	.445

Table E-5

Loadings of Social Impacts on Factors of General Advantage

Variable	Business Development General Advantage	Social Disruptions General Advantage
Downtown revitalization	.15	.117
Bigger city atmosphere	.646	-.037
More entertainment	.171	-.109
More stores	.268	-.001
Increased business	.121	.258
Increased tourism	.587	-.108
Increased land values	.421	-.156
Improved mass transit	.121	-.020
Recognition of the town	.347	.029
Increased foreign visitors	.711	-.056
Increased city size	.763	.015
Downtown parks	.236	-.001
Creation of energy capital	.557	-.004
Improved community spirit	.418	.007
Increased traffic congestion	.191	.445
Increased noise	.112	.744
More and better jobs	.169	.268
Increase in undesirables	-.154	.758
Housing shortages	-.105	.380
Increased crime	-.091	.830
Parking problems	-.007	.415
Air pollution	-.024	.474
Increased taxes*	.439	.319

*Item deleted to increase reliability

Table E-6

Loadings of Social Impacts on Factors of Observability

Variable	Business Development Observability	Social Disruptions Observability
Big city atmosphere	.459	.142
More entertainment	.543	.067
More stores	.413	.300
Increased business	.418	.262
Increased tourism	.486	.193
More and better jobs	.297	.029
Increase in undesirables	.581	.301
Increased foreign visitors	.297	.296
Downtown parks	.278	.144
Improved community spirit	.151	.059
Increased traffic congestion	-.008	.326
Increased noise	.302	.445
Housing shortages	.252	.529
Increased land values	.338	.557
Increased crime	.293	.581
Improved mass transit	.074	.133
Recognition of the town	-.128	.230
Increased taxes	.113	.605
Parking problems	.035	.517
Increased city size	.305	.365
Creation of energy capital	.102	.209
Air pollution	.117	.601
Downtown revitalization*	-.007	.124

*Item deleted to increase reliability

VITA

Oliver Thomas Massey was born in Memphis, Tennessee on July 31, 1954. He grew up in Memphis and graduated from Wooddale High School in 1972. He attended The University of Tennessee, Knoxville and while there met and married Cathy Denise Hopkins. He graduated "with honors" in 1976 with a major in psychology. Tom entered the Ph.D. program at The University of Tennessee in 1977. He intends to secure a position in academics or in a professional research organization. Tom is a student member of the American Psychological Association and the Division of Community Psychology in APA.