SIMULATION AND FOREIGN POLICY ATTITUDES

A Thesis

Presented in Partial Fulfillment of the Requirements
for the Degree Master of ~~Science~~ Arts

by

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The Ohio State University
1969

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ACKNOWLEDGMENTS

I wish to thank the many people connected with The Ohio State University Political Science Department who unselfishly gave of their time and knowledge to help me complete this research effort. A special debt is owed to Dr. Philip Burgess, Director of the Behavioral Science Laboratory, whose ideas and experience, contributed greatly to improvements in the study, and to Dr. Richard Hofstetter whose encouragement and constructive criticisms were always timely and appreciated. The additional guidance from Dr. Randall Ripley and Lawrence E. Mayer, statistical consultant for the Behavioral Science Laboratory and Dr. Burgess' Project CAPE, was also appreciated.

Fred Sexton, Kent Daniels and other research assistants to Project CAPE should also be acknowledged for their help.

Of course, full responsibility for any errors in this thesis is assumed by the writer.

SIMULATION AND FOREIGN POLICY ATTITUDES

CHAPTER ONE: INTRODUCTION AND THEORY

INTRODUCTION

The purpose of this thesis is to examine the hypothesis that simulation affects the foreign policy attitudes and orientations of participants. The motivation for investigating this question evolves mainly from the inconsistency between the positive subjective evaluation of simulation's effectiveness by both instructors and participants and the largely null findings in recent empirical research.

In this introductory section, this inconsistency is explored more explicitly to underline the importance of the study, and a general discussion of simulation is presented to provide a background from which the analysis of the thesis statement may proceed. The remainder of this chapter is devoted to discussing the theoretical reasons for expecting simulation to have an effect on foreign policy attitudes and orientations of participants.

In the remaining chapters, the emphasis is on the empirical analysis of the thesis statement. More explicitly, Chapter Two contains a discussion of the methodological considerations involved in the data gathering procedures, Chapter Three contains the results of

statistical analysis of these data, and Chapter Four contains a reanalysis of the data in light of other variables which theoretically intervene in the original relationships. A final chapter summarizes the theoretical and empirical conclusions of this study and outlines their implications for further research in this area.

Importance of this Study

The importance of this study of the effectiveness of simulation in producing foreign policy attitude change is predicated on the conditions that 1) simulation meets an educational need, and 2) a research gap, which this study could help to fill, exists.

Need for Simulation. While there are many arguments for the use of simulation as an educational device (these are mentioned in the following section of this chapter) the most salient for this study is the "need for students to act on what they are being taught." (Snyder, 1963, p. 11) Snyder sees participation in simulation as a better way of reducing the distance between the student's environment and international reality than the more traditional case study. Moreover, providing this role playing experience, may reduce apathy concerning politics: "Much student apathy concerning politics and national issues may be due to the relatively long postponement of adult roles and to the presentation of abstractions or fact that are outside

the students' real life experiences." (Snyder, 1963, p. 12)

While participation in simulation may bring an effective role playing experience for students in general, this benefit may have special significance to students from underprivileged families who are less likely to have had an opportunity to participate in adult decision making roles since their parents:

> . . .are more likely to be imperative in their control, showing more concern with obedience, external behavior and appearances than with internal states and feeling. They are less likely to give reasons for their commands or to encourage the child to make his own decisions in family affairs. (Hess and Torney, 1967, p. 126)

There is a need then, to provide the student with opportunities to expand this personal experience in ways which may help him place facts and abstractions in perspective. This need would seem particularly relevant to underprivileged students.

The question of whether simulation is an effective means of providing such an experience, as Snyder tentatively suggests, is examined both objectively and subjectively in this next section.

Effectiveness of Simulation. If it is granted that there is a need for policy making experiences in education, then the success of simulation in providing such experience and in producing the related effects must be evaluated. It is in this evaluation that a definite gap between the

positive subjective evaluation of participants and instructors and the negative objective findings in recent research may be seen. This gap is explicated in this section to determine the relevance of this study to the state of the discipline.

The unbridled enthusiasm of the early proponents of simulation has given way to a more conservative appraisal as a result of empirical investigation by Garvey and Seiler (1966), and by other studies summarized by Cherryholmes in a recent article in the American Behavioral Scientist. (1966) Cherryholmes found that, in general, the studies indicate that in simulation, students 1) demonstrate more interest, 2) do not learn more facts, 3) do not retain information any better, 4) do not gain critical thinking abilities, and 5) do not acquire more realistic attitudes than their counterparts in the control groups. (p. 4) Thus, except for the fact that they demonstrate more interest, simulation participating students do not perform significantly better than non-participating students.

These null research findings violate much of the commen sense observations of simulation's effectiveness by both instructors and participants. To elaborate, Burgess, in a recent article (1966), feels that by using simulation as a supplement to other tools of teaching, one can expect students to 1) grasp the information, 2) broaden their perspectives, 3) increase their self-awareness, 4) gain

manipulative and decision-making skills, 5) increase their sense of personal efficacy, 6) acquire a greater amount of empathy with decision makers, and 7) increase their self-motivation for further learning. (p. 38)

Alger (1963) also sees simulation as providing the student with experiences that lead to greater empathy and an increase in decision making skills. In addition, the student is seen as developing a more realistic approach in his evaluative attitudes toward decision making. (p. 180) This evaluation seems to be subjectively validated by the fact that twenty-two of the participants of a simulation experiment at Northwestern University relate that simulation "gives one a realization of the complexities and/or lack of simple solutions to international relations problems" (the second most common evaluation of simulation). (p. 179)

These points are summarized by Snyder (1963) when he states that:

> On the basis of trials in a small number of colleges and high schools, reactions of students and teachers suggest that social scientists may be developing in simulation a most effective means of bringing distant policy realism within the individual's personal experience in a manner which cannot be matched by other teaching materials. (p. 12)

Two expected outcomes of a simulation designed to bring "distant policy realism" to participants, then, are changes to more empathetic and realistic attitudes toward decision making. The research summarized by Cherryholmes,

however, indicates that simulation participants did not acquire more realistic attitudes, although changes in empathetic capabilities as a result of simulation were not mentioned in this summary.

Summary. In this section two conditions were prescribed for this study to be an important contribution in political science--1) a need exists in education for decision making experiences such as those presumably available in simulation and 2) a gap exists between objective and subjective evaluations, particularly in the areas of empathy and gradualism, of simulation that this study could help bridge. It is concluded that a definite need is present to bring "distant policy realism within the individual's personal experience," and that the apparent contradictory evaluations of simulation need to be explicated.

This study is a further attempt to bridge empirically the gap between the objective and subjective evaluations of simulation in producing attitude change. Before theoretically examining this effect, however, a brief description of simulation is provided in the next section as a background for the investigation.

Description of Simulation

"A simulation is an operating representation of the central features of reality." (Guetzkow, 1962, p. 83)

Put in another way, it is a representation of a system that attempts to reproduce processes in action. (Dawson, 1962, p. 5) As such, simulation is an attempt to incorporate the concepts and basic relationships of a system in the "real" (or referent) world into a model that may not look like the referent, but should behave like the referent in ways determined important by the researcher.

The particular simulation that is used in this research is an Ohio State University modification of the Inter-Nation Simulation (INS). (Guetzkow, 1964) A brief description of this simulation will be given to enable the reader to judge the relationship between the model and the referent international system. While this description is too brief to represent adequately the structual model and operating characteristics of the model, it should provide at least some basis for understanding how the system works.

The structure of the INS model employed at The Ohio State University contains seven nations and three decision makers in each nation. It is the function of the participants to make decisions during sixty minute decision periods that affect their national security, national economic well being, and the international world order.

The effects of these decisions are calculated periodically in the simulation run through mathematical formulas and are returned to each nation forming a basis

for their next period's decisions. This procedure has the effect of providing positive or negative reinforcement within a relatively short period after the decisions are made.

In order to promote learning of functions and of political processes and to induce the participants to react to their role responsibilities rather than to copy some national leader's aspirations or style, prototypic nations and decision roles are utilized.*

THEORY AND REVIEW

In the introductory section of this thesis, the importance of this study of simulation's effectiveness in producing attitude change was explored and a brief description of simulation was given to provide a common area of understanding. In addition, it was pointed out that one specific area of disagreement between subjective and objective evaluation of simulation concerns the ability of

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*By assigning certain parameters or capabilities to simulated nations without specific "real world" referents, the simulator may create characteristic types of nations. Nuclear capability, industrial development, alliance structure, and political system characteristics may be reproduced in a simulated nation such as Amra, Bega, Colo, etc. Without any mention of an existing "real world" nation.

Similarly, as a Central, External, or Internal Decision Maker, the participant must fulfill simulation role requirements without patterning his behavior after a President Nixon or Prime Minister Wilson.

this experience to lead to more empathetic and realistic foreign policy attitudes.

The foci of this study, therefore, will be upon one expression of realism--gradulism, and upon empathy. In this section of Chapter One, there is a discussion 1) of those two attitudes, 2) of the theoretical effect of simulation on these attitudes, and 3) of factors that might intervene in the relationship between simulation and attitude change. Four propositions consistant with this discussion are presented.

Foreign Policy Attitudes of Gradualism and Empathy

While an attitude may be defined as "a pre-disposition to respond in a particular way toward a specified class of objects"(Rosenberg, et al., 1960, p. 1), Breer and Locke (1965) present a useful distinction about three specific or different dimensions of such a response--the cognitive, cathectic, and evaluative.

The cognitive orientation refers to a belief about the existential nature of things--it involves neither a like or dislike. Cathectic orientation, on the other hand, implies a liking or disliking of the object(s) to which the person reacts. The final orientation, evaluative, implies that some normative value judgment has taken place. (p. 7)

By this criteria, then, the specific attitudes that simulation is hypothesized to effect are the cognitive orientation of empathy, the ability to perceive the existence of problems facing the decision maker, and the evaluative orientation of gradualism, the normative orientation to policy change.

Gradualism. The evaluative orientation of gradualism studies in this thesis is based on the description provided by Galtung in his article, "Foreign Policy Opinion as a Function of Social Position." (1964) A difference between the gradualist and his counterpart, the absolutist, is

> the absolutist works with black and white, the gradualist with shades of gray . . .the absolutist will not tolerate the ambivalence implied when two social orders, deduced from incompatible ideologies coexist. For the gradualist coexistence will be an empirical, not an ideological problem and he will be better trained for tolerance of the ambivalence of the real world. (p. 211)

Galtung applies this comparison of the gradualist and absolutist to the issue of engagement policies. Examples of gradualist and absolutist attitudes for both persons with a "tough" orientation and persons with a "soft" orientation are found in Table 1.1.

The "all or nothing" orientation of the absolutist, then, is reflected in his acceptance of a preventive war or immediate and unilaterial disarmament instead of a

Table 1.1: A survey of engagement policies for the gradualist and absolutist with tough and soft orientations. (Galtung, 1964, p. 214)

	gradualist	absolutist
tough	1. armament oriented	1. preventive or premptive war
	2. deterrence through strength	2. fighting capacity through strength
	3. no contact with enemy	3. hatred of enemy
soft	1. disarmament oriented; multilateral, balanced	1. immediate disarmament, unilateral
	2. international cooperation, technical assistance	2. renunciation of sovereignty; sacrifice for developing countries
	3. contact with adversary	3. love of adversary

more incremental orientation of deterrence or multilateral, negotiated disarmament.

Empathy. In his book, A Preface to Empathy (1958), Stewart defines empathy as a "deliberate identification with another, promoting one's knowledge of the other as well as of oneself in striving to understand what is now foreign but which one may imagine, curbed by the other's responses, to be somewhat similar to one's own experience." (p. 12)

While the discussion of the effectiveness of simulation in influencing these attitudes is reserved for the

next section, one can see by this definition how simulation could be expected to have an effect of allowing participants to be more empathetic, because 1) foreign policy decision making is remote to the student's environment, and 2) simulation provides a personal experience which may be related to the acquisition of such knowledge.

In other words, for the participant to have greater empathy with the foreign policy decision maker as a result of simulation, he must deliberately make the link between problems he faces in simulation and problems foreign policy decision makers face in their environment.

The next section focuses on the theoretical justification for expecting simulation to have the predicted effect on both gradualism and empathy.

Summary. The two attitudinal orientations on which this study focuses are the cognitive orientation of empathy towards foreign policy decision makers and the evaluative orientation of gradualism toward foreign policy decisions. While the purpose of this section was to provide a definition and discussion of these attitudes, basic theoretical reasons centered on the value of simulation as an experience. In the next section, the effect of this simulation experience is explored theoretically and more thoroughly from two related contexts.

The Effects of Simulation

The purpose of this section is to theoretically analyze the possible effects of a participant's simulation experience on gradualism and empathy attitudes. In order that this goal might be accomplished, this section contains a discussion of the theoretical effect of experience on foreign policy attitudes, and the theoretical effects of simulation, as a task experience, on the specific foreign policy attitudes and orientations of empathy and gradualism. Propositions will be presented consistent with the discussion.

Effect of Experience on Foreign Policy Attitudes. There is theoretical support for a relationship between the two variables--experience and gradualism. One of the basic theses of attitude formation presented by Newcomb, Turner, and Converse (1965) is that experience is the prime determinant of attitudes. (p. 68) Other writers see specific experences related to foreign policy attitudes, such as the effects of cross national contact on international images, which are viewed as one cause of increased cognitive differentiation:

> . . .the effect of first hand experience is reduction of stereotyping--the shifting of the traveler's images from simple black and white perceptions to more qualified perceptions of the foreign reality. (de Sola Pool, 1966, p. 117)

While these more qualified cognitive perceptions do not necessarily lead to a corresponding evaluative change towards foreign policy (gradualism), they may, as Deutsch and Merritt (1966) put it, provide "cues for evaluation." (p. 133)

In the next section, the discussion centers on the effects of simulation on the cognitive orientation of empathy and the evaluative orientation of gradualism. Just as foreign travel provides first hand experience that apparently affects cognitive structure, simulation may also serve this same function. One resultant of this experience may be an increase in empathy. It is hypothesized, moreover, that any cognitive restructuring provides "a cue for evaluation," with the participant moving toaa more gradualistic orientation to change. The discussion of these possibilities is presented in this next section by considering simulation as a "task experience."

Simulation as a Task Experience. A task, according to Breer and Locke (1965), refers to "a complex of stimuli upon which the individual performs certain operations in order to achieve certain outcomes." (p. 7) It is their thesis that working on a task experience enables an individual to develop attitudes, values, and beliefs specific to the task itself that in time may be generalized to other areas of life. (p. 7) While this logic parallels the earlier discussion of the effects of

experience on foreign policy attitudes, the difference is that in a task experience, the individual is actively participating to achieve desired outcomes. An example of this difference is that an experience may be listening to a political candidate, while a task experience is campaigning for him to produce the desired outcome--election victory.

One of the reasons that task experience plays an important role in attitude formation is that it is an important determinant of the specific matrix of rewards and punishments to which an individual can be expected to respond. (p. 11) By being rewarded for outcome oriented responses or behavior, the individual will be more likely to imitate this type of behavior than any others and then gradually to establish attitudes consistent with this behavior.*

This is a reinforcing process of attitude formation in the instance of "a stable, unchanging system . . .where both tasks and orientations remain constant from one generation to the next." (p. 19) In the instance, however, where the task requirements contradict previously formed beliefs and values, it is a dynamic force for attitude change:

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*The psychological need to maintain consistency between behavior and attitudes is advanced by Festinger (1957) and Dollard and Miller (1940).

> Whether we talk about a specific individual vis-a-vis a specific task or a whole aggregate of people vis-a-vis a distribution of tasks, it is this asymmetry between already formed beliefs, preferences, and values on the one hand and the nature of the task demands on the other that provides the impetus to change. (pp. 19-20)

Even if it could be accepted that task experience is a factor in attitude formation and change, the questions remain 1) is simulation a task experience and 2) can simulation produce change in the attitudes of empathy and gradualism?

The first of these questions is simply answered. Simulation is "a complex of stimuli upon which the individual performs certain operations (domestic and foreign decision making) to achieve certain outcomes (economic growth, national security, and international exchanges and transactions). (Breer and Locke, 1965, p. 9) The second question, whether the performance of these operations will cause an increase in empathetic capability and gradualism among participants is more complex and is investigated empirically in this research.

As has been indicated previously one condition necessary for attitude change to occur as a result of task experience is an inconsistency between task demands and previously held attitudes. More specifically for positive changes in gradualism and empathy, the task experience of simulation must confront the decision maker

with problems in foreign policy that are more complex than what the participant had previously thought. Alger sees participants being placed in just this type of environment where they, as decision makers, are

> . . .stimulated to design feasible policies and to make a more concentrated effort to obtain information about the environment in which the policies will be implemented. In the course of performing these activities an area of simple choice becomes one in which the pathways to utopia appear to be more complex. (Alger, 1963, p. 180--emphasis is added)

Because a simulated environment is the setting of this task experience, however, an additional condition must be investigated--whether the participant sees his experience as a high fidelity representation of reality. One of the factors which influences the effectivenss of any communication, is the evaluation of the veracity of the communicator. (Hovland, et al., 1953, p. 237) Correspondingly, one of the factors that may affect the effectiveness of simulation is the subjective validity of the experience for the individual participant. While little empirical evidence is available, an indication that simulation is regarded as realistic is found in the fact that in one experiment, many participants saw simulation as giving one "a realization of the complexities and/or lack of simple solutions to international relations problems." (Alger, 1963, p. 179)

In this section on the effects of simulation on the foreign policy orientations of empathy and gradualism, it is concluded that 1) decision making experience may affect foreign policy attitudes, 2) task experiences help establish or change attitudes, 3) simulation is a task experience, and 4) this simulated experience is seen by the participants as a high-fidelity representation of the complexities of foreign policy decision making. For these reasons, the first hypothesis to be tested in this study is that:

> HYPOTHESIS ONE: A change towards a more empathetic cognitive orientation will be evidenced more by participants in simulation than by non-participants.

It is hypothesized moreover, that any individual cognitive restructuring caused in the participant will "provide a cue" for and result in a more gradualistic evaluative restructuring. A clearer understanding of the link between cognitive and evaluative orientations is given by Breer and Locke (1965):

> Although we have treated them in sequence, it is clear that they (behavior, cognition, cathexis, and evaluation) are all interrelated parts of an ongoing process. Hypotheses are formed, tested against behavior, and subsequently confirmed, discarded, or modified to fit the facts (cognitive orientation). With rewards comes cathexis (cathectic orientation) and eventually the establishment of norms (evaluative orientation). (p. 13)

It should be stressed that any change in evaluative orientation brought about by simulation is preceded by a

cognitive reorganization because no direct effort is made to change a participant's evaluative orientations (values).

Therefore, while the process of influencing a participant's evaluative-gradualist orientation is more indirect and consequently less likely to be successful than the process of influencing his cognitive empathetic orientation, a second hypothesis is offered:

HYPOTHESIS TWO: A change towards a more gradualist orientation to foreign policy will be evidenced more by participants in simulation than by non-participants.

The Intervening Factors

In the discussion in this chapter so far, the theoretical justification for simulation's effectiveness as a task experience in producing foreign policy attitude change has been provided. In this section two intervening factors affecting this original relationship--social position and previous decision making experience--will be theoretically analyzed.

While simulation may have an effect on the previously held orientations of empathy and gradualism, "an intervening variable analyzed in this study is social position. It is hypothesized that:

HYPOTHESIS THREE: A change toward a more empathetic and gradualist approach will be most evident among participants of low social position than among participants of higher social position.

The theoretical justification for advancing this proposition is based on three related considerations. Persons of lower social position should be more affected by information and experience concerning foreign policy decision making since 1) they are less likely to have had decision making experience in their family, 2) they are less likely to have much information about foreign policy considerations and 3) they are more variable in their political attitudes.

In an earlier reference, Hess and Torney (1967) explain how a person from a low social class environment is less likely to have had participation in a decision making role in the family. (p. 126) A decision making role in simulation, therefore, should be a task experience that fosters attitudes, opinions, and beliefs less consistent with previously held attitudes, opinions, and beliefs for these people than for those in a higher social position.

Directly related to this absence of decision making experience, is the fact that persons of low social position are less likely to have information about foreign policy and foreign policy decision makers. Galtung (1964) sees the "social underdog" as being low in social participation, knowledge, and opinion holding. (p. 216) He also sees the consistency between attitudes, between attitudes and behavior, and of attitudes over time as low

for the "social underdog." (p. 216) While this low consistency may be largely a function of less information and decision making experience the social underdog is more likely to be influenced by the simulation experience than one of high social status.

One easily observable opportunity that he does have for decision making experience is in student office holding. This experience should have much the same effect on his ability to empathize with the foreign policy decision maker as the simulation experience. It is hypothesized that either 1) the student office holder has already grown more empathetic with the problems of the decision maker or 2) he has not been able to generalize from that decision making experience to the foreign policy decision making level and is less likely to generalize from the decision making experience of simulation. Either way it can be expected that:

HYPOTHESIS FOUR: A change towards a more empathetic orientation as a result of simulation is less likely to occur in those who hold student office than in those who do not.

SUMMARY

In this chapter the lack of positive empirical findings in studies concerning the value of simulation in different areas was compared with the positive subjective evaluation by instructors and participants and the

predictions of theory drawn from a number of different areas. A justification of this research, then, lies in the attempt to fill this gap between these evaluations.

Following a description of simulation, the discussion turned to the theoretical reasons for expecting simulation to have an effect on foreign policy attitudes. The main focus of this discussion was on the role of simulation as a task experience in producing attitude change. It was suggested that simulation participation is a task that should lead to greater empathy and gradualism.

Finally, social position and student office holding experience were presented as intervening factors in the original relationships between simulation experience and attitude change. Four hypotheses were offered consistent with and derived from this discussion and were presented for testing.

In the next chapter, a methodological discussion of the data gathering procedures utilized to test these hypothesis is presented.

CHAPTER TWO: METHODOLOGY

In the preceding chapter, two important categories of foreign policy attitudes--empathy and gradualism--were discussed, and four hypotheses concerning the specific effects of the simulation experience upon these attitudes were presented.

This chapter deals with the practical considerations involved in the collection of data and the formulation and validation of the instrument which enables us to empirically test these hypotheses. These practical considerations are explicitly analyzed by examining 1) the logic of the study, 2) the data, 3) the operationalization of variables, and 4) the validity of indices.

LOGIC OF THE STUDY

It is difficult in any research to approximate an ideal research design, but it is even more difficult in research "piggy-backed" on an experiment designed primarily as a pedagogical device. The first part of this section contains a discussion of the experimental design upon which this research was based and the second part contains a discussion of intervening influences that might bias the findings.

Experimental Design

To determine if simulation participation produces a change in the direction of more empathetic and gradualistic orientations to the foreign policy decision making arena, pre and post simulation questionnaires were administered to both experimental and control groups. If membership in the two groups were randomly selected, this type of design would fall into Campbell and Stanley's (1963) category of "true experimental designs". Unfortunately in this research, participants in the INS were self selected members in a senior level international relations class with the control group consisting of those who either did not desire to participate, or could not participate because of other obligations.*

Since the experimental and control groups were not randomly assigned, the design used falls in the "quasi-experimental" category. The value of this design is discussed by Campbell and Stanley (1963):

> In particular it should be recognized that the addition of even an unmatched or nonequivalent control group reduces greatly the equivocality of interpretation over what is obtained in the One Group Pretest-Protest Design. The more similar the experimental and control groups are in their recruitment, and the more the similarity

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*Five students indicated that they wished to participate but were not selected because of the limited number of offices available in the simulation. These people were relegated to the control group.

is confirmed by the scores on the pretest, the more effective this control becomes. (p. 217)

The influences of using these non-equivalent groups as well as other factors which might influence the validity of this design are discussed in the next section.

Design Validity

There are several sources of factors that may effect the validity of any experimental design. These may be summarized under the headings of internal and external validity.

Among the "internal sources of invalidity", Campbell and Stanley list effects of 1) history, the specific events occurring between the first and second measurement in addition to the experimental variable; 2) maturation, processes within the respondents operating as a function of the passage of time; 3) testing, the effects of taking a test upon the scores of a second testing; 4) instrumentation, changes in the calibration of the measuring instrument; 5) statistical regression, regression of extreme scores; 6) selection, bias resulting from differential selection; 7) experimental mortality, or differential loss of respondents from the comparison groups; 8) selection maturation interaction, etc., interaction between a biasing factor and another factor. (p. 175)

Of these eight sources of internal invalidity there is little or no reason to believe that there were biasing influences of instrumentation, regression, or experimental mortality. There is, however, a need to briefly discuss the other possible sources of invalidity since there was differential selection of test groups, and there were minor differences in time intervals between the administration of the pre and post questionnaires.

Because the post test was given to sections of the experimental group approximately three and four weeks after the pre test was administered, and to the control group approximately six weeks after the pre test, there is a chance for influences of maturation, history, and testing to have a differential impact on experimental and control groups. There is little evidence, however, that this differential impact would bias the findings towards the acceptance of the hypotheses presented. In fact there is some evidence that greater maturation time may incline the individual towards a more gradualistic and empathetic orientation. Differences in history caused by this time difference would have been difficult to measure and effects of testing were not measured because of the small sample size available for use. Nevertheless, it is assumed that the actual amount of difference between testings for the different group is not an invalidating

factor since intervals between pre and post testing do not differ by much.

There is one other internal source of invalidity that must be discussed--selection. As has already been pointed out the experimental and control groups were not randomly selected. The reasons for using this non-random sample are linked with the educational purposes of the exercise, and the limitation of resources. One consideration was that the exercise demanded that the students spend a Friday evening and a Saturday morning and afternoon in actual participation and additional time in preparation. A second consideration was time and space shortages. At the Behavioral Sciences Laboratory at Ohio State University, approximately twenty-four INS participants per run could be comfortably accommodated. By using two different weekends, then, about 48 students could be handled. Since not everyone could participate, since participation would require some sacrifice on the part of the student, since there were many people that had other responsibilities on the dates of the simulation runs, and since the primary purpose of the exercise was educational rather than experimental, a self-selection instead of random selection process was used.

It can easily be conceptualized how this self selection process could bias the results. One may expect that students 1) with more of an interest in international

relations, 2) with more self confidence, 3) with more motivation toward receiving good grades and/or 4) with a history of participation in other activities such as student organizations would be more likely to participate in the simulation than other students. In fact, however, a descriptive comparison yields only minor differences between the two groups. (See Table 2.1)

Table 2.1: Comparison of Experimental and Control Groups on factors which might bias the results.

	Average Experimental	Control
Average Interest in IR (4 point scale)	2.25	2.10
Grade in Class (50 possible points)	41.3	39.9
GPA in all courses (4 point scale)	3.1	2.7
% belonging to at least one organization	44.5%	35.0%
% holding at least one student office	25.6%	10.0%
	n = 39	n = 20

In addition to these internal factors, four factors which Campbell and Stanley list as possibly affecting the external validity or representativeness of the sample are 1) the interaction affect of testing, 2) the interaction

effects of selection biases and the experimental variable, 3) reactive effects of experimental arrangements, and 4) multiple treatment interference. (pp. 175-6)

The first jeopardizing factor is the effect of the pre test upon the sensitivity of the experimental group. One way of experimentally controlling for this effect is to have two additional tests groups. One of these groups would take only the post test and the other group would participate in the experiment and then take the post test. If there were no sensitizing affect of the pre test, then the results in the post tests of the additional experimental group would approximate those of the original experimental group. Similarly the results of the two control groups should be roughly equivalent. Unfortunately in this research, the sample size was too small to implement this design, and the interpretation of the results of this study must allow for the possibility of these interaction effects of testing.

The second possible jeopardizing factor may also operate in this research. Since the experimental group was self-selected, a very real possibility exists that students motivated enough to participate in simulation would respond to the experience differently than would one not so motivated.

The third factor, the reactive effects of experimental arrangements, involves concern that experimentally produced

results can be generalized to non-experimental settings. Since simulation must, by definition, be held in an artificial or experimental setting, this factor is not relevant.

Effects of multiple treatment interference, the fourth factor which could jeopardize the external validity of the research, is also not relevant to this study since multiple treatments were not used.

THE DATA

General Background

The control and experimental groups were drawn from a senior level international relations class. The simulation experience is designed to allow the participant to apply and test many of the concepts and theories of decision making that are discussed in the course lectures and included in the readings, and to develop more empathy with the problems that decision makers face.

Of the 75 students in the class, only 59 completed both the pre and post questionnaires. Of these 59 students, 78% are from Ohio, Illinois, Indiana, Michigan, or Wisconsin. Others are from the East and South. They were mainly from the urban areas (39%) although there were many from small towns (29%) and the suburbs (25%). Less than a fifth of the subjects were girls (19%) and only 10% were underclassmen. Most of the sample was 21 or older

(60%) and 75% of the total sample were majoring in Political Science.

Operationalization of Variables

In order to statistically analyze the hypotheses presented in Chapter One, operational definitions of social status, student office holding, empathy, and gradualism need to be established. A person can be said to have held a student office if he answers a question to that effect positively. The other three variables are much more difficult to operationalize. Indices for these variables were developed in concordance with the discussion in an article by Galtung (1964). In this section, these indices are presented and results of reliability and validity tests of these indices are presented.

In order to measure the dependent variables of empathy and gradualism and the control variables of social status and student office holding, a questionnaire was developed which consisted of two sections. (See Appendix A)

The first section was designed to obtain experiential and socio-economic status data. The second section consists of twenty-two statements which the student responded to on a four-point forced-choice Likert scale. The specific way in which this information is used to develop the indices in this study follows.

Social Position. As has been established earlier, a person may be placed on a continuum of social standing ranging from the center to the periphery. According to Galtung (1964), eight determinants of a person's relative social position along this continuum are his sex, age, education, income, ecological location, occupational position, and occupational sector. (See Table 2.2) By adding the scores for each individual on these eight rank-dimensions according to the criteria outlined in Table 2.2, and index ranging from 0 to 8 is established.

Table 2.2: Galtung's Composition of the Index of Social Position. (Galtung, 1964, p. 217)

	Criteria	Topdog or Central (Score 1)	Underdog or Peripheral (Score 0)
1.	Sex	male	female
2.	Age	30-59	below 30, above 60
3.	Education	more than primary	primary or less
4.	Income	above median	below median
5.	Location, ecologically	urban, suburban	rural
6.	Location, geographically	central	peripheral
7.	Occupation, position	white collar, self-employed	blue-collar
8.	Occupation, sector	secondary, tertiary	primary

Unfortunately, criteria used for the general population are not equally applicable to the population from

which our test groups are drawn. Since all of the subjects are under 30 years of age, and since they all have more than primary level of education, the rank criteria for these dimensions were changed. But more importantly the occupational dimensions have little relevance to the college student. Two dimensions that could be used to categorize a college student as either "topdog" or "underdog", however, are membership in campus organizations and possession of scholarships. A student could be considered less on the periphery and more rewarded if he belonged to campus organizations and/or if he held a scholarship. The composition of the index of social position as used in this study is presented in Table 2.3. Justification for scoring criteria listed in this table will not be fully explicated since it directly follows from basic assumptions about the value structure of American society. The determination of which areas should be considered as having a central geographic location and which have a peripheral location, however, will be explained.

A list of the fifty states and the District of Columbia was sent to five members of the political science faculty and graduate school. This "Columbus Panel" was asked to subjectively rank the fifty states either as center or periphery by the criteria of their socio-political position in relation to decision making centers

Table 2.3: The Composition of the Index of Social Position

		Topdog or Central (Score 1)	Underdog or Peripheral (Score 0)
1.	Sex	male	female
2.	Age	21 and over	under 21
3.	Education	upper classman	underclassman
4.	Social Class	upper	middle and lower
5.	Location, ecologically	urban, suburban	small town, rural
6.	Location, geographically	central	peripheral
7.	Campus Organizations	member	non-member
8.	Scholarships	one or more	none

in the political, financial, commercial and industrial arenas. There was about 88% agreement on these subjective rankings which are reported in Appendix B.

Gradualism. Reviewing the differentiations between gradualism and absolutism in Table 1.1, Galtung hypothesized that of the persons with a "soft" orientation, the absolutist will be in favor of renunciation of sovereignty as opposed to international cooperation; immediate and unilateral disarmament; and a self sacrificing position in regard to foreign aid for developing countries as opposed to a more moderate position.

Among the persons with a "tough" orientation, on the other hand, the absolutist in Galtung's theory would be more likely to see the need for preemptive war; would favor a military strength position less for reasons of

deterrance than for fighting capacity, and would be more likely to have a hate for the enemy which might be observed in a position of intransigence in world affairs.

In order to measure gradualism of respondents with tough as well as with soft orientation, the second part of the questionnaire reflects these differentiations. It consists of a series of statements to which the student responds on a four point, forced choice Likert scale. The statements are so worded that an agree strongly will sometimes support an "extremely gradual" position and sometimes an "extremely absolutist" position. This probbem is solved by the coding procedure of scoring a 1 for agree strongly to 4 for disagree strongly on statements worded one way and scoring a 4 for agree strongly to 1 for disagree strongly for questions stated the other way.

By using the criteria set forth by Galtung, the following statements were formulated to differentiate between the tough gradualist and the tough absolutist.

16. If an enemy nation is growing rapidly in strength and becoming more hostile, preventive wars are sometimes justified.

19. A nation should maintain just enough military power to keep its enemies from starting a war.

22. In foreign policy making, political leaders are far too willing to compromise when the welfare of the country is at stake.

Of these three statements in only one (Statement 19) would a "disagree" or "strongly disagree" response

indicate an absolutist among the students with a tough orientation. In the other two statements, the more the toughly oriented student would agree with the statement, the more absolutist he would be. After adjusting for these differences by the method described above, a Guttman scale can be and is attempted with a one or a two scored as a positive response, a three or four as a negative response, and no answer as a "0" response. (Anderson, 1966)

Similarly, to measure the gradualism of a softly oriented person, the following statements were formulated also according to previously mentioned criteria presented by Galtung:

10. The underdeveloped countries can best be assisted by expanding international cooperation among the developed nations and expanding technical assistance programs.

13. If nations would renounce their sovereignty, we would have many fewer problems in the world today.

15. Peace could probably be obtained if one of the great powers announced its intention to disarm unilaterally. Other nations would soon do the same.

17. The developed countries should make radical self-denying sacrifices for the welfare of the less developed countries.

In each of these statements expect for statement 10, where it is just the opposite, an "agree" or "agree strongly" indicates an absolutist and a "disagree" or "disagree strongly" indicates a gradualist. Because only

two respondents agreed with statement 10, however, the Guttman scale of gradualism for the "soft" respondents is restricted to the other three statements.

The Coefficient of reproducibility of the Guttman scale for the "tough" respondents is .97. Similarly, the Guttman coefficient of reproducibility for the "soft" respondents is .96. Even though the coefficients of reproducibility were considerably above the accepted level of .90, subsequent analysis revealed that the limited range of the index does not premit adequate testing of change scores. Thus the gradualism index is constructed by adding the response scores for the same statements outlined above. A "soft" respondent, therefore, would score a "three" for agreeing strongly with statements 13, 15, and 17 and would score a "twelve" for disagreeing strongly with these same three questions.

Tough-Soft. In order to measure the gradualism of the respondent, as it was previously discussed, a method of classifying him as either "tough" or "soft" was needed. For this purpose, the Tough-Soft Index was created. Like the index of gradualism, the statements were worded according to the criteria presented by Galtung. (Table 1.1)

All positive responses to statements worded in a tough manner and all negative responses to statements worded in a soft manner were scored 1. By using eight

statements, a score of zero would indicate an extremely softly oriented person and a score of eight would indicate an extremely toughly oriented person. For the purposes of this paper, a person with a score of four or above is considered tough and a person with a score of three or below is considered soft.

Table 2.4: Scoring of Items in Tough-Soft Index

Statement Number		Score	
		Agree	Disagree
See Appendix A for actual text of questions.	6	1	0
	7	0	1
	8	1	0
	9	1	0
	11	0	1
	12	1	0
	14	1	0
	18	0	1

Empathy. The two statements that measure empathy are similar in format to the statements mentioned above. The index of empathy is determined by adding the response score for these two following statements:

4. One of the major problems in foreign policy making is the time pressures on decision makers. They have too little time to plan and make rational decisions.

5. The average educated man probably does not understand the many complexities in foreign policy making that on the surface seem very simple.

A score of eight would indicate a person with considerable empathy and a score of two would indicate a person with little empathy. The higher the index score, then, theoretically, the greater the individual's empathy.

Originally two other statements were included in the empathy index (statements 2 and 3) but were removed when it was decided that they were measuring an evaluative dimension of the cognitive attitude.

Validation of Indices

Unfortunately, time pressure prohibited pre-validation of the indices used in this study. This section will analyze the adequacy of the indices used.

An indication that the original index of gradualism is reliable was found by using the Coefficient of Reproducibility for the Guttman scales. This measure is not applicable, of course, for the substituted index, but the validity of this index may be partially determined by relating it to another factor.

According to Galtung, (1964), social position is related to gradualism. The closer a person is to the socially rewarded center, the more gradual he is likely to be. This relationship was borne out his research. (p. 223) Although the sample size is small a weak

relationship between these factors also appears in this study for the "tough" respondents. Unfortunately this relationship is not found for the "soft" respondent.

Validity of the empathy index can be tested by determining the relationship between that index and an index composed of the other two statements included in the original measure of empathy. Although a slight relationship is found to exist,* analysis and interpretation will be undertaken in this study with full recognition of the shortcomings of relatively unvalidated indices.

SUMMARY

In this chapter, the research design was discussed and analyzed for any possible weaknesses. The major shortcoming of the design was the lack of randomness in the experimental group selection process. This fault was mitigated somewhat by a statistical comparison of the two groups on various criteria.

The indices that are used in this study were described and reliability and validity checks were made on the attitudinal indices. The index of empathy failed to form a unidimensional scale and the alternative scale proposed was found unreliable

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*Using the Tau-B statistic, a .11 correlation was found.

The results of the study must at best be interpreted cautiously. In the next chapter, the hypotheses of Chapter One will be tested using these indices. Reanalysis of these results will be made in the fourth chapter and a final summary will be made in the last chapter.

CHAPTER THREE: RESULTS

In the first chapter, four hypotheses were derived concerning the degree to which a simulation experience affects foreign policy attitudes of participants. The second chapter discussed the experimental design and data base that were used in testing the hypotheses. This chapter discusses the statistic used to test the hypotheses and the results obtained.

THE STATISTIC

One statistic that is commonly used for testing the differences between summary scores of separate samples is the difference of means test. To be able to inductively generalize relationships in a sample with a certain probability of accuracy using the difference of means test, three assumptions must be made:

1. the level of measurement of the dependent variable is interval
2. the samples are random and independent, and
3. the populations are normal (Blalock, 1960, p. 172)

Of these three assumptions the one that is most seriously violated in this study is the sampling assumption. In the last chapter the biasing effects of the self-selective sampling process which this research was forced to employ were discussed. The expectation was that students who were more interested, self-confident,

dedicated and involved would be more likely to participate in the simulation. Intuitively, the interested, dedicated and involved type of student would be more susceptible to attitude change, although an accompanying high degree of self-confidence might mitigate this propensity.

Some additional comments should be made about another of the assumptions--interval scale level of measurement--before discussing the statistic itself. To assume that the level of measurement of the empathy and gradualism scales are interval rather than ordinal, one must assume that the measurement is some linear function of the true magnitude, i.e. differences in objects can be precisely determined. (Hays, 1963, p. 71) The degree of confidence that one must have in this assumption to interpret statistical results as a valid statement about real properties varies with the situation, the objectives, and the techniques employed. A case is made by Skipper, et al. (1967) for assuming the higher level of measurement to justify a more powerful statistic. (pp. 16-18) Also see Labowitz (1967).

Since the sample size is small, the "t" distribution is used with a level of significance of .05 for a one tailed test. The common variance is estimated by obtaining a pooled estimate from both samples. (Blalock, 1960, p. 174)

BETWEEN GROUP COMPARISON

This section analyzes the differences between the experimental and control groups in their change in empathy and gradualism. Change scores are obtained simply by subtracting the pretest from the post test index scores.

Empathy

In the first chapter, an attempt was made to show that simulation is a task experience that students accepted as a high fidelity representation of reality and that task experiences may help establish or change attitudes. Having experienced perceived similar decision-making problems, then, simulation participants are hypothesized to change towards a more empathetic attitude toward decision makers than do non-participants.

As can be seen by Table 3.1, participants did change more toward an empathetic attitude than did non-participants.

The statistical procedure for discovering if this difference is significant is to try to reject the null hypothesis that:

H_O: A change toward a more empathetic cognitive orientation is not evidenced more by participants in simulation than by non-participants.

Since the computed value of "t" (2.22) is greater than the critical level of 1.68, the null hypothesis is rejected in favor of the alternate hypothesis that there

Table 3.1: Change in mean empathy scores by simulation participants and non-participants

	Pre $\bar{X}$	Post $\bar{X}$
Participants n=34*	6.1**	7.0
Non-Participants n=21	5.6	5.9

is a significant difference between the change scores of participants and non-participants at the .05 level. Enthusiasm for this finding is, of course, tempered by the understanding that independent random samples were not used.

Gradualism

While there was significantly more change in empathy scores among participants, a similar change in gradualism scores is harder to expect. Change in an evaluative attitude should only occur when a related cognitive restructuring has occurred, but a change in a cognitive attitude does not necessarily force a more

*Five cases in which the pre-text index score was already at the maximum level were dropped. With these cases included the mean empathy change was not as great since these participants could only stay the same or have a lower empathy score.

**A higher index score indicates a more empathetic position.

value-laden evaluative attitude change. In Galtung's (1964) words, "It is possible to perceive and not select, but not to select without any perception; evaluation presupposes cognition." (p. 208) Apparently the simulation experience was not sufficient to bridge the gap between the cognitive and the evaluative. Table 3.2 demonstrates that, as groups, simulation participants and non-participants did not change at all in their evaluative gradualistic orientation.

Table 3.2: Change in gradualism scores by participants and non-participants.

	Pre $\bar{X}$	Post $\bar{X}$
Participants n=35	8.3*	8.3
Non-Participants n=18	8.2	8.2

WITHIN GROUP COMPARISON

The hypotheses presented in Chapter One not only concerned differences between the INS participant and non-participant groups but also differences between social status groups and differences between leadership experience groups.

*A higher index score indicates a more gradualistic position.

Social Position

It is hypothesized that a change toward a more empathetic and gradualist approach will be more evident among participants of low social position than among participants of higher social position. The discussion in Chapter One indicated the reasoning behind this position. In general, persons of lower social position 1) are less likely to have had decision making experience in their family, 2) are more likely to be more variable in their political attitudes, and 3) are less likely to have much information about foreign policy considerations. As such they should be more affected by the decision making experience and information provided by simulation.

In Table 3.3, the data indicates that the periphery changed less toward an empathetic position than did the social center not supporting the hypothesis that they would change more. The data also indicated that the periphery

Table 3.3: Empathy and Gradualism change scores for participants of low and high social position.

	N	$\bar{X}$ Empathy Change Score	N	$\bar{X}$ Gradualism Change Score
Low Social Position	23	+.70	21	-.24
High Social Position	12	+.92	13	+.23

moved toward a more extreme position while the center moved toward a more gradualistic position not supporting the hypothesis which predicted greater change toward a gradualistic position by the periphery. The difference in change scores is not significant at the .05 level.

Student Office Holding

The experience of student office holding should have much the same effect on an individual's empathetic capability as does the simulation experience. For this reason, it is expected that a change towards a more empathetic experience as a result of simulation is less likely to occur in those who held a student office than in those who do not.

The change scores in Table 3.4 indicate that this is indeed the case. The difference of means test using the "t" distribution is again utilized to determine if the

Table 3.4: Empathy change scores for participant student office holders and non-office holders.

	N	$\bar{X}$ Change Score
Office Holders	9	+.55
Non-Office Holders	25	+.88

difference in empathy scores between student office holders and non-office holders is significant at the .05 level.

The null hypothesis is that:

H_0: A change towards a more empathetic orientation is no less likely to occur in those who hold student office than those who do not.

Since the computed value for "t" is .66 which is less than the critical value of 1.69, the null hypothesis cannot be rejected at the .05 level and it is concluded that there is no significant difference in change in empathy between participant student office holders and non-office holders.

SUMMARY

Of the four hypotheses presented in the first chapter, only one is supported by the data. It was found that participants changed significantly more in their empathy with decision makers than did non-participants. This indication of cognitive restructuring was not accompanied by a restructuring of the evaluative orientation of gradualism. Among simulation participants, moreover, the lower social status (periphery) group did not move toward a more gradualistic attitude and they did not change more toward an empathetic position than did higher social status group (center). Thus, the third hypothesis was completely unsupported.

Although the data indicate that the last hypothesis concerning the relationship between student office holding and empathy change was correct, the difference between office holders and non-office holders was not found to be significant.

In the next chapter, theoretical and statistical inductive interpretation and explanation of the results presented in this chapter is provided.

CHAPTER FOUR: INTERPRETATION

The last three chapters of this thesis have dealt with the formal process of hypothesis testing: theoretically generating hypotheses on an a priori basis, operationalizing the variables, formulating the research design and methodological procedure, collecting the data, and statistically testing the hypotheses with this data.

This chapter contains a partial explanation and interpretation of these results inductively derived from a reanalysis of the data and from general observation. Many of the conclusions reached in this chapter should be examined through further research to enable a greater degree of confidence to be placed in them.

STATISTICAL INTERPRETATION

One common shortcoming of experimental research is failure to consider variables which might influence original relationships. In terms of this research, the participant's propensity or ability to change his empathetic or gradualistic orientation to foreign policy decision makers and decision making, may very well be influenced by demographic variables affecting his psychological composition and situation variables affecting his perception of the efficacy of the simulation experience. Effects of two of these intervening variables, social position and student office holding, have already been

theoretically and statistically examined. This section analyzes effects of other variables which intuitively seem to be important.

Situation Variables

The variables that have not received attention thus far in this study of the effects of simulation are those which reflect the differential impact of roles played in simulation. In the specific example of the modified Inter-Nation Simulation, these important variables are 1) the size of nation one participated in, and 2) the decision making role one played. The size of the nation in which a decision maker participates could easily help determine the psychological rewards of the simulation. Large nations in the INS as in reality have much more latitude of action in terms of resources and power. Consequently a decision maker from a large nation would be less likely to experience the frustrations and failures of the smaller nations.

Very little difference is found between participants in large and participants in small nations, however, in either empathy or gradualism change scores. More difference is found between types of decision makers.

As was discussed in Chapter One, each nation consists of three decision makers--the central decision maker (CDM), the external decision maker (EDM) and the internal

decision maker (IDM). Of these three, the one which never leaves the country to participate in international conferences, and the one which usually seems to end up with the most paper work and the least decision making is the IDM. The IDM, possibly because of less involvement or more frustration, could be expected to be less positively affected by the simulation experience. While there is little difference shown in change in gradualistic orientation by decision making role, there appears to be a difference between decision makers in empathetic change.* (See Table 4.1)

Table 4.1: Comparison of Empathy Change scores of IDM with the other Decision Making Roles.

	N	Empathy Change Score
IDM**	9	.44
Other	26	.92

By using the two tailed "t" test for difference of means, however, this difference is not found to be significant at the .05 level.

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*Since decision making roles were filled on the basis of results of a simulation quiz, differences may be due to selection rather than experiences.

**Includes students who started as CDM but were demoted to IDM as a result of a successful vote of No Confidence.

Demographic Variables

The discussion in Chapter Three indicated that the index of social position, as modified from the Galtung study, did not significantly affect attitude change scores. Among the eight factors that this index is composed of, is sex, age, and social class. An analysis of these factors as they affect attitude change is made in this section.

The influence of the "sex-role differentiation" on the types of international images that are held is discussed by Scott. With reference to several other studies, he argues that the women students tend to be more passive in their evaluative international policy attitudes as well as in a wide range of other attitudes (Scott, 1966, pp. 97-98). This attribute could affect their psychological ability to change their gradualistic attitudes in the face of aggressive activities by other decision makers. It could also affect their ability to actively participate in the simulation.* By being less involved, therefore, they would be less likely influenced by the simulation experience.

In this study men and women differ little in their change of attitudes as a result of simulation. Moreover,

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*In the majority of cases, the female participants did intuitively appear less active.

the lower class differs little from the higher class in this respect.*

There is a difference, however, between age groups in both empathy and gradualism change scores. As can be seen in Table 4.2, the participants under the age of 21 changed little towards a more empathetic attitude compared with their older counterparts. By using the difference of means

Table 4.2: Comparison between age groups of participants in empathy change scores.

	N	$\bar{X}$ Empathy Change Score
Under 21	20	.35
21 and Over	15	1.33

"t" test, moreover, this difference proves significant at the .05 level. With the two tailed test using 33 degrees of freedom a value of "t" of 2.04 is needed. Since the computed value of "t" is 2.44, the indication is that there is a significant difference between the 21 and over age group and the under 21 age group in their empathy change scores. The difference, however, is not in the direction that would be predicted from Galtung's

*The logic for speculating a difference between social classes may also be interpreted in role differentiation terms (Scott, 1966, p. 98)

center-periphery hypothesis. In other words, if it can be assumed that the "under 21" group is less socially rewarded, more idealistic, and more on the periphery and if the simulation is indeed a tool to bring "distant policy realism" into an individual's sphere of reference, then the group that would seem to have the most to gain would be that "under 21" group. On the other hand, the participants who are 21 and older may have changed more toward an empathetic position as a natural outgrowth of their position in the maturation process rather than as a function of the simulation experience. If this were the case, then there would not be a significant difference in empathy change scores between the older participants and the older non-participants.

Examination of the data using the "t" test, however, reveals that there is a significant difference between the two groups (Table 4.3). The simulation experience, then, does appear to have an effect on empathetic attitudes over and above the effects of age, but this experience affects older students significantly more than younger participants.

Just as the simulation experience affects the empathetic attitudes of a certain age group more than others, it also affects the gradualistic orientation of different aged participants differently. Again, among the

Table 4.3: Comparison of Empathy Change Scores of the Older Participants with the Older Non-Participants

$t = 2.58$

	N	$\bar{X}$ Empathy Change Score
Participants 21 and over	20	1.33
Non-participants 21 and over	15	.40

participants, the older group demonstrated a greater change toward gradualism than did the younger participants. (Table 4.4)

Table 4.4: Comparison Between Age Groups of Participants in Gradualism Change Scores

	N	$\bar{X}$ Change in Gradualism Score
Participants under 21	20	-.45
Participants 21 and older	15	.40

This difference did not prove significant, however, at the .05 level of significance. Closer examination revealed that the 21 year old and 22 year old participants differed considerably from the under 21 and over 22 groups. (Table 4.5) A division of the participants into these three age groups, therefore, might prove meaningful.

Even with the small sample sizes, the 21 and 22 year olds prove significantly different from the participants

Table 4.5: Comparison of Gradualism Change Scores of Participants in Three Age Categories.

Age Groups	N	$\bar{X}$ Change in Gradualism Score
Participants Under 21	20	-.45
Participants 21 or 22	9	1.22
Participant over 22	6	-.83

under 21 years of age and those over 22 years of age. The respective computed "t" values of 3.28 and 3.74 are greater than the critical levels of 2.05 and 2.16.

The significance of this finding is underscored by the fact that this is the only instance in which significant differences in mean gradualism scores between groups is found. It must be remembered, however, that these groups were inductively selected and that in this as in other tests in this chapter, significance is an indication not a probabilistic interpretation.

Remembering the differences between age groups, it is surprising that similar results are not obtained by controlling for college classification. There is little apparent and no significant difference between the sophomore, junior, senior, and graduate participants in this research in their change in empathetic or gradualistic orientations. Relatedly, little difference exists between groups determined by the number of political science

courses participants had taken in either gradualistic or empathetic attitudes.

Of all of the controls that were used then, both situational and demographic, the only one that holds much promise for future investigation is the factor of age. In the next section of this chapter, subjective interpretation is made of these results and the results of the original statistical tests presented in Chapter Two.

SUBJECTIVE INTERPRETATION

In the last chapter and in the first part of this chapter statistical analysis was performed with data generated from pre and post questionnaires given to a group of international relations students. This analysis was performed to better determine if simulation has utility in providing the student with a basis for attitude change. The need now exists to subjectively interpret these results in the context of the original theoretical justification for the research.

Before this subjective interpretation is made, however, some of the factors which may influence this interpretation are listed.

Considerations

The Sample. One of the most important considerations is the use of non-random samples. While this lack of randomly selected groups is common in educational research,

the degree of confidence that one can have in significant differences between these groups is diminished. This is especially true if the selection process used may bias in a manner which would tend to substantiate research hypotheses.

In this research, the self-selective process could easily cause the experimental group to be more interested, more involved, and more concerned with their grade in the class. It can be intuitively reasoned that this type of student would be more receptive to new information than would the less interested, less involved or less concerned individual. An analysis of the data, moreover, indicates that members of the experimental group are slightly more interested in International Relations, more involved in student organizations, and more concerned with their grade in the class if grade point average is any indicator. While these differences do not appear great, the possibility of this research design bias cannot be overlooked.

The Testing Conditions. Another area of consideration which cannot be overlooked is the context in which the pre and post questionnaires were administered. It is conceivable that this context could have a very real effect on the reliability of the experiment.

Unfortunately, the conditions under which students completed the questionnaires were less than perfect. The pre-test was administered immediately after the students

completed a regular hour examination. The post test for the simulation participants, moreover, was administered immediately after they had spent over five hours (without lunch) involved in the simulation--and before a debriefing session with the simulation director. The physical and emotional state that these students were in at both points could easily have a direct bearing on the way they responded to the questions. While these conditions were unfortunate they were, to a large extent, unavoidable because of the educational requirements of the course.

A second testing condition that might have existed and should be considered is what Campbell and Stanley call "reactive arrangements." A reactive arrangement occurs when the participant is aware that he is part of an experiment and reacts to the procedures and experimental treatment not only as simple stimulus values, but also for their role as clues in divining the experimenter's intent. (Campbell and Stanley, 1963) In this research, the students were aware that research was being conducted. Whether or not they were able to determine the purposes of the research and, if they did, whether they adjusted their answers to either prove or disprove the research hypothesis is not known. Since the subjects were informed that this research was independent of the course, however, there is no reason to expect dishonest responses to the questions.

The Indices. As was noted in Chapter Two, the indices for gradualism and empathy were developed ex post facto. Confidence in the research findings is diminished by the lack of previously validated indices.

ANALYSIS

With these considerations in mind, this section analyzes the impact of the statistical results on the research hypotheses.

An Overview. The specific purpose of this paper is to examine the effects of simulation on the foreign policy attitudes of empathy and gradualism. The first two research hypotheses, therefore, were that simulation participants will change significantly more towards 1) an empathetic and 2) a gradualistic orientation than will the non-participants. Because the knowledges, the store of experiences, and the psychological predispositions of the participants can influence the effect of an experience such as simulation, other hypotheses were offered to explain this differential impact.

One indication of the experiences, knowledges, and predispositions of an individual is his social status. Since simulation is filling an experiential void that is linked with the lower social status, participants in this category are hypothesized to change more toward gradualism and empathy than those of the higher social status.

The final major hypothesis was that participants in simulation who are holding a student office on campus, because of their experience, will change less toward empathy than participants who are not holding a campus office.

Other factors such as age, sex, perception of social class, school classification, grade point average, and simulation office held, are also tested for their effects on participants' attitude change.

Of the four hypotheses presented in this research, only the first one was confirmed by the data. If one discounts the possible biasing effects of sampling, reactivity, and the selection of indices, he may, at the 95% level of confidence, state that participants in simulation change more towards an empathetic orientation than non-participants.

Hypotheses. In trying to explain why the data did not support the other three hypotheses, three tentative interpretations are offered: 1) a single simulation experience is not generally sufficient to produce a change in evaluative attitude, 2) the factor of the age of the participant was not taken into consideration in the hypotheses and 3) the campus environment provides few experiences that the international relations student will, or is able to, generalize to the national or international

level. These three subjective interpretations are now briefly elaborated.

Earlier in the paper, Galtung's model of attitude formation was discussed. His perception was that a cognitive orientation restructuring was necessary for an accompanying or succeeding evaluative orientation restructuring. It seems highly possible that participants in this simulation were able to take the first step of cognitive reorientation (empathy) but were not prepared on the basis of one five hour experience to apply this new understanding to their existing evaluative orientation.

It is one thing to confront a participant's lack of knowledge about the problems of decision makers with a task experience which forces him to face these problems. But it is completely another to challenge his normative, idealistic philosophy of international politics through these same experiences. It was not expected that the simulation experience would, or even could, change a person's hawkish attitudes to dovish or vice versa. But the data have indicated that this one experience was not sufficient to change a hawkish (or dovish) absolutist attitude to a hawkish (or dovish) gradualist one.

Simulation could have value in causing gradualism attitude change in one of three ways. First, students could participate in more than one run. This would enable their perception of the complexities of foreign

policy decision making to be reinforced. In addition multiple explosures would allow opportunity for the participant to reflect upon the applications of simulation experiences to "real world" problems.

This last benefit is closely related with the reasoning behind the second method of making simulation more effective in causing gradualism attitude change. This method is to provide an activity or discussion at the conclusion of the simulation run to encourage and aid participants to digest, synthesize, and apply insights gained from simulation.

At Ohio State University, the simulation is followed by a lively, interesting, and apparently beneficial "debriefing" in which students make comments and respond to comments and questions by the simulation director and class instructor. In this research, the post questionnaires were completed before this debriefing. If they would have been given after the debriefing, it is very possible that a more significant change in attitude would have occurred. Of course, in an experimental situation if this debriefing were "led" by the director or instructor, the danger of "reactivity" would become large.

A third method of making simulation more effective in changing gradualistic attitudes involves the preparation of the participants. Simulation would be more effective in changing attitudes as reinforcement of previously

introduced information. Consequently participant preparation which included mention or discussion of the complexities involved in problem solving could be useful in producing less absolutist prescriptions in foreign policy decisions.

Of course certain people are more "prepared" than others to be influenced in the direction of gradualism without planned preparation. The data demonstrated that participants of certain ages are more likely to change in their empathy and gradualism scores. The reasons that these participants were more prepared to be influenced are discussed in the next section.

The second interpretation for the largely null results in this research is the failure of the study to take the factor of age into account. Ex post facto analysis of the data in this experiment indicated that the 21 and older participants changed significantly more toward empathy than the under 21 group. This attitude change by the older participants was not due solely to maturation since the change proved significantly more than that experienced by the 21 and older non-participants.

Statistical analysis also showed that the 21 and 22 year olds changed significantly more toward gradualism than did the under 21 group or over 22 group.

Age, then, does appear to be an important factor. One explanation of this difference between age groups is

the difference in their predisposition to change. It is a hypothesis of this thesis that the 21 and 22 year olds that participated were experiencing other pressures to adopt more "realistic" attitudes toward "real world" decision making which predisposed them to change their attitudes more readily during and after their simulation experience.

At the age of 21, they are assuming more legal, political, and actual responsibility. Their role expectations are being determined more by the adult society and consequently they may be striving to attain a set of attitudes more congruent with that society.

Two interpretations have been offered for the non-support of three of the research hypotheses. A brief discussion of the final interpretation that college students are unable to generalize their campus decision making experiences to the international arena is now provided.

In making this statement, there is an assumption that student decision makers are confronted with the complexities of problems that the average student does not experience.

This assumption will not be equally valid in all situations. Concerning campus organizations, the validity of this assumption varies with the type of student organization, autonomy of student leadership in the

organization, and leadership position held. The treasurer of the campus art club, for example, would probably not face the magnitude of the complexities of decision making as would the president of the student assembly.

Even if the experiences of a substantial number of decision makers does generate an appreciable awareness of the complexities of problems that they face, these students must be able to generalize their experiences to those of foreign policy decision makers. The cognitive distance that must be travelled between the two experiences may have been too far.

In any case, the data indicated the college student is unable to generalize from his campus decision making experiences. Before this conclusion can be confidently accepted, however, additional research with more carefully weighted values for student experiences should be conducted.

SUMMARY

In this chapter partial interpretations are offered for the results of the original hypotheses. Using inductive statistical analysis and subjective reasoning these three interpretation hypotheses were generated to explain the results:

1) A single simulation experience is not sufficient to produce a change in evaluative attitude,

2) The factor of age should be taken into consideration in the hypotheses, and

3) The international relations student will not, or is not able to, generalize from campus decision making experiences to the national or international level.

These interpretative hypotheses and other factors relating to the research design as validation of indices, selection of samples, and the reactivity of students serve as bases for further research suggestions in the next chapter.

CHAPTER FIVE: CONCLUSIONS

In the preceding four chapters, the need for this study was explored, hypotheses were extracted from the theoretical framework, the methodology was established for the research, and the statistical results were presented and interpreted. This chapter summarizes this research and makes recommendations for future studies in this area.

SUMMARY

The focus of the research, it will be recalled, is on the effect of simulation on the foreign policy attitudes of the participants. Simulation is hypothesized to affect the cognitive foreign policy attitude of empathy since 1) simulation is a task experience, 2) task experiences have been shown to help establish or change attitudes and 3) the simulation experience is seen as a realistic method of demonstrating to the participants the complexities which the decision maker faces.

By restructuring the participants' cognitive images of the complexities of foreign policy decision, moreover, it was hypothesized that simulation would alter their related evaluative attitudes. The specific evaluative attitude that was selected for study was gradualism. Theoretically, a person who could see more complexity in foreign policy decision making, would be less likely to

continue to support absolutist policy recommendations or more likely to advocate gradualistic policies. Of course, a task experience such as simulation would not uniformly affect all participants. Individuals do not possess either the same information or the same store of experiences. Participants of low social status are hypothesized to change more toward empathetic and gradualistic attitudes because 1) they are less likely to have had decision making experience in their family, and 2) they are less likely to have much information about the complexity of foreign policy decisions.

Another factor which is hypothesized to cause the non-uniform effectiveness of simulation is student office-holding. This experience should have much the same effect as simulation in demonstrating the complexities of decision making. The participant who has had campus decision making experience, consequently, 1) should already have become more empathetic with the problems of the decision maker, or 2) was not able to generalize from that decision making experience to the foreign policy decision making level and is less likely to generalize from the decision making experience of simulation. Therefore, the student office holder is hypothesized to change less toward a more empathetic orientation than is the non-student office holder.

To test these four hypotheses, pre and post tests were given to a group of international relations students who participated in simulation and a group of international relations students who did not.

Since the pedagogic purposes of the class superseded the experimental design of the research in importance, students were allowed the option of participating in the simulation or remaining in the control group. This factor, plus the ex post facto formulation of the indices and possible reactivity of the students, are three of the reasons that positive results in this research must be interpreted cautiously.

Unfortunately, this caution is necessary only in the first of the research hypotheses--that participants in simulation would change significantly more toward empathy than would non-participants.

The lack of significant differences between experimental and control groups in gradualism or between experimental groups in empathy and gradualism required further analysis and alternative interpretations.

In testing differences between groups classified in turn by size of nation and decision making position in simulation and by sex, social class, age and school classification, one factor appeared significant--age. Using inductive classification of participants, significant differences between age groups were found in both

empathy and gradualism change scores. The twenty-one and older participants were significantly different in empathy change scores from the under twenty-one group and the twenty-one and twenty-two year olds were significantly different from the under twenty-one group and over twenty-two group in their gradualism change scores.

The difference between age groups in their foreign policy attitude change scores indicates that the simulation experience has more of an impact with certain age groups than with others. One interpretation for these results is that twenty-one and twenty-two year olds are beginning to look to the adult society for their role expectations and are striving to attain a set of attitudes more congruent with that society.

Statistical analysis also revealed some difference in change scores between the Internal Decision Makers and the other decision makers. This difference, however, was not statistically significant and could easily have been caused by the practice of assigning the most capable students to the Central Decision Maker and External Decision Maker roles.

The statistical analysis, then, dictated one interpretation for the lack of positive results on three of the four research hypotheses--that the factor of the participant's age was intervening variable. This data indicated that the twenty-one and twenty-two year olds are

attitudinally more predisposed to be affected by simulation. Further research may substantiate these findings and discover other ages at which simulation is more effective in changing participants' attitudes.

Besides this age factor interpretation, two other interpretations were offered for the inconclusive results of this research. The first of these additional interpretations concerns the lack of support for the hypothesis predicting gradualistic attitude change and the second concerns the lack of support for the hypothesis predicting greater empathy change for those who do not hold campus office. The gradualistic orientation of the participants may not have been affected because of the process of attitude formation outlined by Galtung (1964); "It is possible to perceive and not select but not to select without any perception." (p. 208) It is one thing to confront a participant's perception of the problems of decision makers with an exercise that forces him to face these problems. It is another to challenge his idealistic selection of foreign policy alternatives. Of course, simulation experience(s) in general should be more effective if the participant were experiencing pressures towards gradualism external to the simulation. For example, the simulation experience could be reinforced by the processes of maturation, focused classroom discussion, and increasing decision making responsibilities, and be

more successful than if the experience were not reinforced. The second interpretation for the lack of statistical results, then, is the need for reinforcing experiences for simulation to have an effect on gradualism.

A third interpretation concerns the lack of a significant difference between campus office holders and non-office holders in their empathetic attitude change scores.

It was assumed that participants with campus decision making experience would be less likely to change towards empathy since they had already either 1) changed toward empathy, or 2) were more resistant to change. On the other hand, if the campus office holding experience tended to cause an empathetic change but, in fact, did not, it could serve as a reinforcement for simulation's effect.

In either case there was not a significant difference between office holders and non-office holders. Moreover, grade point average, college classification, and the number of political science courses taken failed to explain significant variation in participants' empathetic attitude change. The tentative interpretation is offered, therefore, that the psychological space between campus decision making level and the foreign policy decision making level is too great to affect the change in cognitive or evaluative foreign policy attitude of a

participant. In other words, the subject may not be able to project the types of experiences that he faces as a campus decision maker to the national level.*

This study has given rise to certain implications for future research concerning simulation's effectiveness in changing attitudes. These implications are briefly discussed in the next section.

RECOMMENDATIONS

As was stated in the first chapter, the purpose of this thesis is to examine the hypothesis that simulation affects the foreign policy attitudes of participants. In the process of statistically testing this hypothesis and through reanalysis of the data, certain procedural and substantive changes were indicated to more adequately assess simulation's effectiveness in producing foreign policy attitude change.

Procedurally, pre-validation of indices and random sampling of experimental groups would provide a sounder basis for evaluation and statistical generalization than would inductively generated indices and self-selected

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*The same person may be able to project from an Inter-Nation Simulation experience because 1) the policy decisions are specifically designed to replicate actual foreign policy alternatives (war, blockade, aid, trade, alliances), and 2) a certain amount of legitimacy is given to INS because it was originated and presented by respected scholars in International Relations.

samples. While these and other procedural changes would enhance further research in this area, the focus of this section is to recommend more substantive revision.

The three major recommendations for future research that are indicated by this study are: 1) more closely examine the age factor, 2) investigate the effects of reinforcement through multiple exposure to simulation or through other methods ancilliary to simulation, and 3) expand and modify the dependent variable--foreign policy attitudes.

The determination of what age groups are more affected by simulation would seem to justify further experimentation. In the sample that was used for this research, the twenty-one and twenty-two year old participants seemed more amenable to change than other participants. Further research should be done to be able to generalize that finding. Nevertheless if the potentials of simulation are to be adequately explored, the phases in the educational cycle in which simulation could be used to the greatest advantage must be discovered.

A second area in which empirical investigation is indicated is in the effectiveness of multiple exposures to simulation in producing attitude change. The point was made in the analysis of the data that a single, unreinforced experience of participation may not have been sufficient to produce any realignment of idealistic,

evaluative orientations. If simulation participation were a force toward gradualism, then additional simulation experiences may be helpful. Of course, additional participation may also contribute to increased empathy with foreign policy decision makers.

Alternative approaches to this increased participation exist which would theoretically reinforce the simulation experience. A post simulation round table evaluation of the experience in terms of the lessons it offers in international relations helps the participant to bridge the gap between the simulated world and the "real world." This exercise seems to be effective at Ohio State University. Since the post test was given before the post simulation session, no measurement of the session's effect was available in this research. Future research might explore this effect while carefully controlling for reactivity or instructor bias.*

The final recommendation concerns the inclusion of different dependent variables. This expansion may move in three separate directions: the dependent variable may 1) include a measure of cathectic or (affective)

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*From a practical standpoint, the multiple treatment design in simulation may be too expensive in terms of time, money, and facilities to use. Research using other methods of reinforcement such as the post simulation discussion or specially planned classroom instruction may have to "satisfice."

attitudinal position, 2) utilize issues which are less abstract, and 3) relate the dependent variable to a game culture.

In Galtung's Journal of Peace Research article (1964) on foreign policy attitudes he presents a model of attitude formation (or change) which utilizes the cognitive and evaluative facets of foreign policy attitudes. Breer and Locke (1965) distinguish an additional component of attitudes--the cathectic or affective component. The function of simulation in influencing this like-dislike attitude component was not considered in this research but is necessary to provide a more complete realization of simulation's role in producing attitude change. A side benefit might be a better understanding of the processes through which evaluative attitudes may be changed.

In this light, questions should be designed which specifically measure the cognitive, cathectic, and evaluative components of the same attitude. Instead of assuming that measures of empathy indicated a complexity of cognitive images, as was done in this study, specific questions should be asked which measure cognitive (and cathetic) components of the evaluative attitudes used.

Another suggestion concerning the utilization of different dependent variables is to include questions which are less abstract. Galtung's (1964) measurement of

gradualism utilized questions which measured the Norwegians' attitude toward the North Atlantic Treaty Association, Peace Corps, and atomic weapons. Similarly, in future research about simulation's effectiveness in changing foreign policy attitudes, specific attitudes on Vietnam, the Middle-East, NATO, Biafra, etc. could be used.

The final recommendation concerning the modification of the dependent variable is to correlate the attitudinal measurements with the game culture. The game culture in simulation is the aggregate of the parameters and the historical context with which each nation operates. In the simulation runs that this research used, three large and four small nations were faced with the responsibility of settling a jurisdictional dispute over a protectorate. Of course they had other responsibilities of maintaining peace and improving their own well being. While there are common lessons to be learned from each simulation run, specific points may become more salient because of particular game cultures. The attitudes which might be affected by these points should be specifically measured by the questionnaire.

APPENDIX A: PRE-SIMULATION QUESTIONNAIRE

Simulation Evaluation

This questionnaire is designed to help us evaluate the simulation exercise. We encourage you to answer each question frankly and candidly, and we assure you that the information will be treated confidentially. In exchange for your cooperation, we will send you summaries of our evaluation if you want to receive them.

☐ I want to receive a summary.

Personal Data

1. Your INS nation_____ 2. Your INS office _____

3. Your age_____ 4. Your major field _____

5. Your year in college (Freshman, Soph., Jr., Sr., Grad.) _____

6. College in which you are enrolled _____

7. Your cumulative grade point average at end of last quarter _____

8. Your cumulative grade point average in your major field at end of last quarter _____

9. How many trips, if any, have you made outside the U.S.? _____

10. If you have traveled outside the U.S., where did you go? _____

11. How many courses, if any, have you had in the following:

    Political Science _____ Economics _____ History _____

12. In what city or town have you lived most of your life?

    _____
    (city) (state)

13. How would you describe that town? urban ___

    suburban ___ small town ___ rural ___

14. Is your church preference: Protestant _____

Catholic _____ Jewish _____ Other _____

15. Would you consider your family's social status to be:
1. upper upper _____
2. lower upper _____
3. upper middle _____
4. lower middle _____
5. upper lower _____
6. lower lower _____

16. How many times between first grade and high school graduation did your family move from one town to another? _____

17. Generally speaking, do you usually consider yourself a:
Republican _____
Democrat _____
Independent _____
Other _____

18. If you answered Republican or Democrat to the above, would you consider yourself, as a Republican or Democrat:
strong _____
not very strong _____

19. If you answered Independent or Other, which party do you tend to favor?
Republican _____
Democrat _____

20. What is your father's occupation? _____

21. Did your father attend college? _____

22. Did your mother attend college? _____

23. If living, in what state do your parents reside? _____

24. What student organizations do you belong to? _____

_____

25. In which of the above do you hold office? _____

_____

26. Do you hold a scholarship or a fellowship? _____

27. Do you hold a part-time job during the school year?

_____

28. If so, how many hours weekly do you work? _____

29. What career plans, if any, do you now have? _____

_____

30. How many generations has your father's family lived in America? _____

31. What is your school address? _____
(street) (city) (state)

32. What is your home address? _____
(street) (city) (state)

International Politics and Foreign Policy Judgments and Opinions

Read quickly through the following statements. Record your reaction on the line below the question; see example. Be sure to answer each question.

Example: People should be more open-minded about extra-sensory perception.

agree strongly	agree moderately	disagree moderately	disagree strongly
		X	

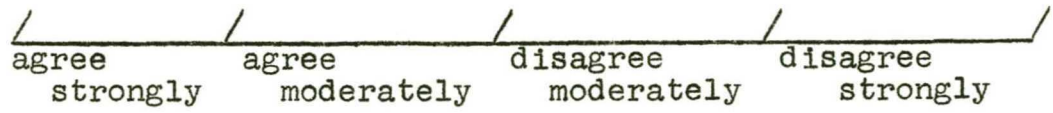
1. Compared with other fields of study, how would you rate your interest in international relations?

very strong interest	strong interest	moderate interest	very little interest

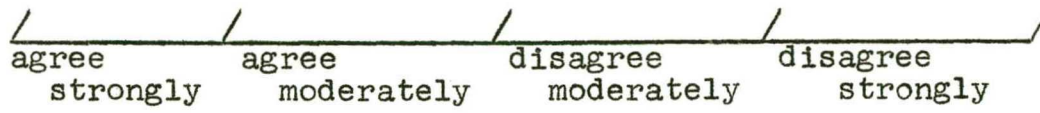
2. Because of the complexities and uncertainties, foreign policy decisions should be left primarily to the President and his close advisors..

agree strongly	agree moderately	disagree moderately	disagree strongly

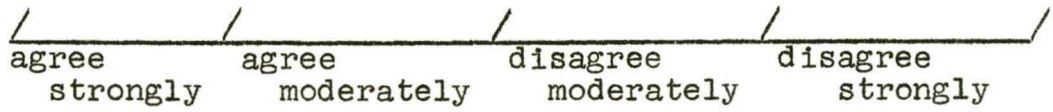
3. The world situation would be much better today if world leaders were more controlled by public opinion in their nations.



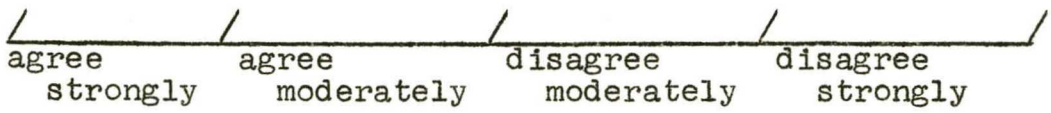
4. One of the major problems in foreign policy making is the time pressures on decision makers. They have too little time to plan and make rational decisions.



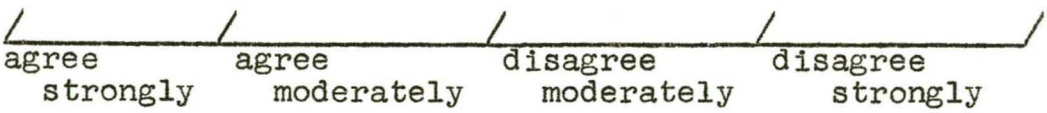
5. The average educated man probably does not understand the many complexities in foreign policy making that on the surface seem very simple.



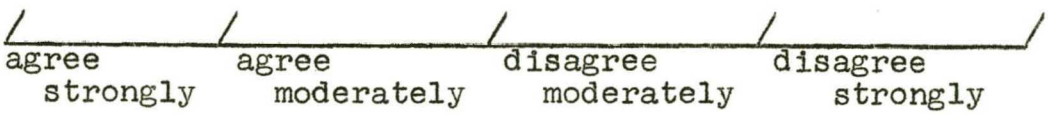
6. Armaments are costly and dangerous, but in this day and age, they are necessary if a nation is to maintain its independence.



7. World peace can be secured only if peace-loving nations maintain their military and political superiority over would-be agressors.



8. An international collective security system through the United Nations is preferable to networks of regional alliances for maintaining international peace.



9. The only way to lasting peace is by making continuing efforts toward balanced arms control and inspected disarmament.

agree strongly	agree moderately	disagree moderately	disagree strongly

10. The underdeveloped countries can best be assisted by expanding international cooperation among the developed nations and expanding technical assistance programs.

agree strongly	agree moderately	disagree moderately	disagree strongly

11. The only way to be successful in international politics is to maintain a position of strength and superiority over your adversaries.

agree strongly	agree moderately	disagree moderately	disagree strongly

12. If nations simply trusted each other more, most of the serious international problems today would disappear.

agree strongly	agree moderately	disagree moderately	disagree strongly

13. If nations would renounce their sovereignty, we would have many fewer problems in the world today.

agree strongly	agree moderately	disagree moderately	disagree strongly

14. If major international problems are to be solved, major nations and adversaries must have much more contact with each other.

agree strongly	agree moderately	disagree moderately	disagree strongly

15. Peace could probably be obtained if one of the great powers announced its intention to disarm unilaterally. Other nations would soon do the same.

agree strongly	agree moderately	disagree moderately	disagree strongly

16. If an enemy nation is growing rapidly in strength and becoming more hostile, "preventive wars" are sometimes justified.

agree strongly	agree moderately	disagree moderately	disagree strongly

17. The developed countries should make radical, self-denying sacrifices for the welfare of the less developed countries.

agree strongly	agree moderately	disagree moderately	disagree strongly

18. A nation should not have diplomatic relations with those nations who show great hostility toward it.

agree strongly	agree moderately	disagree moderately	disagree strongly

19. A nation should maintain "just enough" military power to keep its enemies from starting a war.

agree strongly	agree moderately	disagree moderately	disagree strongly

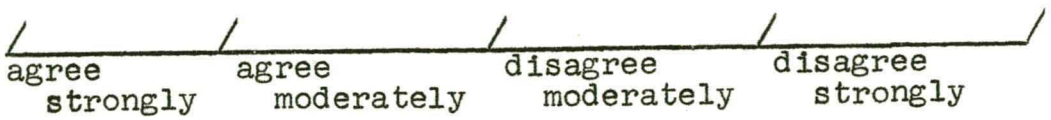
20. Foreign policy is more a product of internal domestic considerations than of international considerations.

agree strongly	agree moderately	disagree moderately	disagree strongly

21. The best way for a nation to maintain its position in the world is to take a stand and then stick to it.

agree strongly	agree moderately	disagree moderately	disagree strongly

22. In foreign policy making, political leaders are far too willing to compromise when the welfare of the country is at stake.



APPENDIX B: POST-SIMULATION QUESTIONNAIRE

Your INS nation _____

Your INS office _____

If you held more than one office, which ones did you hold?

first _____

second _____

third _____

Simulation Appraisal

You have taken part in an exercise designed to implement the development of new educational and policy analysis techniques.

In order that we might know what this experience meant to you, we desire negative as well as positive reactions, as long as they express your true feelings.

1. Write either "yes" or "no" beside the following according to how accurately they describe your views of the simulation.

   NOTE: BE SURE TO PUT "YES" OR "NO" IN EVERY BLANK.

   ___physically more exhausting than a normal day's work

   ___almost always more going on than I could handle

   ___found it stimulating

   ___felt very involved in my nation

   ___mentally more exhausting than a normal day's work

   ___ found my thoughts often wandering to things outside the simulation

2. Circle no more nor less than 5 of the following adjectives that best describe your experience today. Please read the list completely before answering.

natural	correct	different	realistic
involving	interesting	stimulating	enjoyable
educational	challening	complex	useful
thorough	slow	fast	chaotic
tedious	confusing	unrealistic	boring

3. Please rate this exercise as an educational experience. (CIRCLE ONE).

A (good) B C D F (poor)

4. Every attempt has been made to make this exercise a totally factitious situation. It may, however, remind you of some past or present historical situation. Did it?

YES NO (CIRCLE ONE)

a. If so, what situation? Please describe it: _____

_____

_____

b. What particular thing in the fictional situation made you think this?

_____

_____

_____

5. Would you say there could have been any participants in the simulation acting under instruction from the Simulation Director?

YES NO (CIRCLE ONE)

If you answered yes, indicate who these participants are by position and nation:

_____ _____

_____ _____

6. Rank the three roles according to how interesting you feel they would be to the average participant. 1= most interesting 3=least interesting.

RANK

CDM _____

IDM _____

EDM _____

International Politics and Foreign Policy Judgments and Opinions

Read quickly through the following statements. Record your reaction on the line below the question; see example. Be sure to answer each question.

Example: People should be more open-minded about extra-sensory perception.

agree strongly	agree moderately	disagree moderately	disagree strongly
		X	

1. Compared with other fields of study, how would you rate your interest in international relations?

very strong interest	strong interest	moderate interest	very little interest

2. Because of the complexities and uncertainties, foreign policy decisions should be left primarily to the President and his close advisors.

agree strongly	agree moderately	disagree moderately	disagree strongly

3. The world situation would be much better today if world leaders were more controlled by public opinion in their nations.

agree strongly	agree moderately	disagree moderately	disagree strongly

4. One of the major problems in foreign policy making is the time pressures on decision makers. They have too little time to plan and make rational decisions.

agree strongly	agree moderately	disagree moderately	disagree strongly

5. The average educated man probably does not understand the many complexities in foreign policy making that on the surface seem very simple.

agree strongly	agree moderately	disagree moderately	disagree strongly

6. Armaments are costly and dangerous, but in this day and age, they are necessary if a nation is to maintain its independence.

agree strongly	agree moderately	disagree moderately	disagree strongly

7. World peace can be secured only if peace-loving nations maintain their military and political superiority over would-be agressors.

agree strongly	agree moderately	disagree moderately	disagree strongly

8. An international collective security system through the United Nations is preferable to networks of regional alliances for maintaining international peace.

agree strongly	agree moderately	disagree moderately	disagree strongly

9. The only way to lasting peace is by making continuing efforts toward balanced arms control and inspected disarmament.

agree strongly	agree moderately	disagree moderately	disagree strongly

10. The underdeveloped countries can best be assisted by expanding international cooperation among the developed nations and expanding technical assistance programs.

agree strongly	agree moderately	disagree moderately	disagree strongly

11. The only way to be successful in international politics is to maintain a position of strength and superiority over your adversaries.

agree strongly	agree moderately	disagree moderately	disagree strongly

12. If nations simply trusted each other more, most of the serious international problems today would disappear.

agree strongly	agree moderately	disagree moderately	disagree strongly

13. If nations would renounce their sovereignty, we would have many fewer problems in the world today.

agree strongly	agree moderately	disagree moderately	disagree strongly

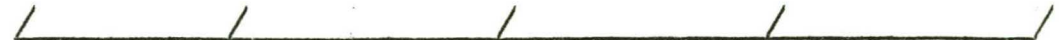
14. If major international problems are to be solved, major nations and adversaries must have much more contact with each other.

agree strongly	agree moderately	disagree moderately	disagree strongly

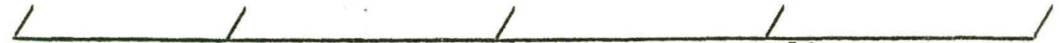
15. Peace could probably be obtained if one of the great powers announced its intention to disarm unilaterally. Other nations would soon do the same.

agree strongly	agree moderately	disagree moderately	disagree strongly

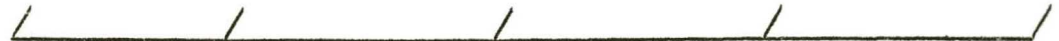
16. If an enemy nation is growing rapidly in strength and becoming more hostile, "preventive wars" are sometimes justified.



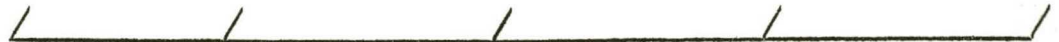
17. The developed countries should make radical, self-denying sacrifices for the welfare of the less developed countries.



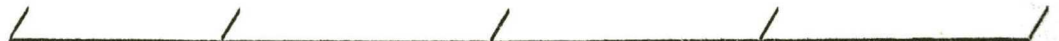
18. A nation should not have diplomatic relations with those nations who show great hostility toward it.



19. A nation should maintain "just enough" military power to keep its enemies from starting a war.



20. Foreign policy is more a product of internal domestic considerations than of international considerations.



21. The best way for a nation to maintain its position in the world is to take a stand and then stick to it.

22. In foreign policy making, political leaders are far too willing to compromise when the welfare of the country is at stake.

APPENDIX C: CENTER-PERIPHERY RANKING OF 50 STATES--INSTRUCTIONS TO MEMBERS OF COLUMBUS PANEL

In an attempt to replicate a study by Johan Galtung (Galtung, 1964, p. 206) on the effects of social position on attitudinal orientation, I will need to rank subjectively all fifty states on a dichotomous center-periphery scale.

According to Galtung, the person near the center will be high in social participation, knowledge, and opinion holding. He is the initiator of most communication and he lives in the socio-political "center" of the nation. A person on the periphery is just the opposite. He is low in the first three attributes, the receiver or imitator of communication, and he lives in the socio-political periphery of the nation.

A suggested criteria, therefore, for evaluating the location of a state is by its socio-political position in relation to decision making centers in the political, financial, commercial and industrial arenas.

In order to rank the 50 American states on a center-periphery scale, I am instituting a "Columbus Panel." Using the criteria suggested above and your best judgment, will you please rank the states on the following list: 1=center, 2=periphery.

Please return this to me as soon as possible in the endorsed campus envelop.

A list of the 50 American States followed.

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