DOCUMENT RESUME

ED 099 944 CS 500 939

AUTHOR Brashen, Henry H.
TITLE Research Methodology in Another Culture: Some Precautions.
PUB DATE Apr 74
NOTE 21p.; Paper presented at the Annual Meeting of the International Communication Association (New Orleans, Louisiana, April 17-20, 1974)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS Changing Attitudes; College Students; *Communication (Thought Transfer); *Cultural Differences; Cultural Factors; Higher Education; Non Western Civilization; Research Criteria; *Research Design; *Research Methodology; *Research Problems; Role Playing
IDENTIFIERS *Japanese Culture

ABSTRACT

A study was undertaken to determine some of the methodological considerations that can lead to a more reliable and valid end product in intercultural experimental research. The subjects were bilingual native Japanese college students in Tokyo. The project included a pretest, treatment, and posttest. The pretest determined the attitude of the subjects on a number of attitude items. Two months later, the subjects were randomly assigned to a role playing condition and placed into dyads where an active participant argued a counterattitudinal position suggesting that all Japanese be required to learn English. Immediately following the treatment, a posttest was administered to measure the attitude change. Three conditions determined whether the methodology used was appropriate: language problems, experimenter bias, and intercultural differences. By examining the possibilities of these conditions occuring, their effect was lessened, and the experimental research was strengthened. It was concluded that precautions must always be taken to ensure that methodological and practical considerations have been adhered to. (TS)

Research Methodology in Another Culture: Some Precautions

by

Henry M. Brashen
Department of Speech
University of Washington
Seattle, Washington

International Communication Association
New Orleans, Louisiana
April 17-20, 1974

Researchers, in building and testing theories in their own culture, often find it difficult to achieve the desired experimental conditions required to adequately investigate the theories. This difficulty is magnified many times when conducting experimental research in another culture. The purpose of this paper is to discuss some precautions researchers should consider when conducting experiments in another culture. These precautions are primarily methodological considerations and this writer believes that utilization of them can lead to a more reliable and valid end product in intercultural experimental research.

The idea for this paper developed out of an experience writing a dissertation (5) which examined the effects of counterattitudinal role playing, passive participation, and two variations of personal space upon attitude change among Japanese. A review of the purpose, hypotheses, and findings of this dissertation wibl serve as a starting point for this paper. This will be followed by an examination of the precautions, their importance in intercultural research, and how these precautions can best be followed.

The dissertation examined the generalizability of role playing theory and personal space theory upon attitude change in another culture. More specifically, it tested theory that was established in the United States, with Americans, in Japan to see if generalization was tenable. Moreover, it provided an experimental setting in which the nonverbal variable personal space was tested along with a verbal variable--role playing. Finally, it provided information about measurement technique and experimental designs in the Japanese culture.

From related research results and theoretical information, the following hypotheses were developed:

(1) People verbalizing counterattitudinal messages will show greater positive attitude change than those listening to the messages.

(2) People who are induced to communicate with another at personal distance will show more positive attitude change than those who are induced to communicate at intimate distances.

(3) When confronted by counterattitudinal persuasive messages, active personal participants should show more positive attitude change than passive personal and active intimate subjects, and passive intimate subjects should show the least amount of positive attitude change.

The key variables were operationalized as follows: Personal space was defined as the physical distance in inches and feet that communicatees were apart from each other. Intimate distance was 6-8 inches between subjects and 12 inches between chairs in which the subjects were seated. Personal distance was 2 1/2-4 feet between subjects and 3 feet between chairs. (12, 113-31) Active participation through counterattitudinal role playing referred to the condition in which the subject was induced to assert orally what had been stated in an outline as if it represented his own opinion. Passive participation was the condition where the subject silently read the outline and attended to the communication, but did not orally verbalize it. Positive attitude change referred to the shift in position from pretest to posttest of a group mean score on a Likert scale in the direction advocated by the outline. (5, 56)

The sample of subjects was made up of bilingual[1] native Japanese college students at International Christian University (ICU) in Tokyo. The accessible population of subjects were all bilingual native Japanese freshmen, sophomores, juniors, and seniors at ICU.

The project included a pretest, treatment, and posttest. The pretest was conducted to determine the attitude of the subjects on a number of

[1]Bilingual will be taken to mean subjects who speak both Japanese and English.

attitude items. Approximately two months after the pretest, the subjects were randomly assigned to one of the conditions of role playing and personal space and placed into dyads within which the active participant argued a counterattitudinal position suggesting that all Japanese be required to learn English. Immediately following the treatment, a posttest was administered to measure the attitude change.

It was found that active participation did not produce an attitude change significantly different from the passive condition. Moreover, attitude changes was not significantly different between conditions of personal and intimate space. Furthermore, there were no interaction effects between personal space and role playing. See tables 1 (factorial analysis of variance) and 2 (analysis of covariance).

TABLE 1

Anova

Source of Variation	df	ss	ms	f	sig (.05)
1	1	21.3333	21.33333	.9545	ns
1	1	27.0000	27.00000	1.2272	ns
12	1	12.00000	12.00000	.5454	ns
Within Replicates	44	1009.33333	22.93939		
TOTAL	47	1069.66667			

TABLE 2

Ancova

Source	df	vv	ss (due)	ss (about)	df	ms
Treatment (between)	3	94.2292				
Error (within)	44	1312.0833	.8588	1311.2245	43	30.4936
Treatment error (total)	47	1406.3125	7.1838	1399.1287	46	
Difference for testing adjusted treatment means				87.9042	3	29.3014

Null Hypothesis: No difference among treatments after adjusting with covariates.
F (3, 43) = .961 ns at .05 level

Two plausible explanations of the results were hypothesized. First, there were no differences and the theories of active-passive participation and personal space were not tenable in predicting attitude change. Second, there were differences, but these were not detected. An examination of the nature of Japanese subjects[1] and especially design weaknesses prompted this writer to assert that the second explanation was the most tenable.

The findings and explanations of the study generated the key idea in this paper, and that is that we, as researchers and theorists, cannot assume that all variables which affect attitude change in our (American) culture, also operate on the Japanese, or even if they do, as the key variables of concern did in this study, that they operate in the same way.

In testing generalizability of our theories in another culture, two precautions should be considered to determine if the same variables being studied operate on both cultures and whether or not they operate in the same way. First, the culture one is working in musbe be studied to determine if the methodology to be employed is appropriate. Second, in carrying out the research, careful plans must be made to insure the availability of subjects and resources and to solicit assistance from qualified researchers in the culture under study.

It is important to study the culture one is working in because what may be appropriate procedure in one culture may be inappropriate in another culture without first determining whether the methodology is appropriate;

---

[1]This examination was utilized to determine if the variables of concern, type of participation and personal space, operated on Japanese people. It was determined that they did. (5, 120)

it might be that methodology that is used with success in the United States might generate misunderstanding or distrust in another culture such as the Japanese. Moreover, one must first study the culture in which one plans to work in order to have some idea how the variables operate. For example (and this will be discussed later), it would not be appropriate with Japanese subjects to ask them to reveal intimate information about themselves in a questionnaire. Knowledge of the culture can aid in making empirical, methodological, and theoretical decisions.

The importance of determining if the methodology is appropriate (by means of studying the culture one is working in) can be illustrated by looking at conditions that existed in the experiment. By examining the possibilities of these conditions occurring, one can lessen their effect in any study and the validity of any experiment can be strengthened. These conditions were language problems, experimenter bias, and intercultural differences with respect to two of the key variables (personal space and role playing), and they could have influenced the results of the experiment.

First, language problems on the part of the Japanese subjects could explain why active participants did not show more attitude change than passive participants. One of the key variables necessary for attitude change is improvisation. According to pioneering research on the affects of role playing on attitude change by Janis and King (18), improvisation is the key to explaining the differential effectiveness between active and passive participation. Improvisation, they pointed out, forces the individual to consider new supporting arguments, and in this way he persuades himself to change his beliefs. Improvisation, in terms of biased scanning, (18, 186) increases the salience of the positive arguments and therefore increases the chances of acceptance of the new attitude position.

In this study, the active participant had little time to engage in improvisation and biased scanning necessary for attitude change. Subjects had little time to study the outline for content. Each dyad was afforded less than 30 minutes for the whole treatment, and a good percentage of the time was devoted to understanding the written directions and the outline, and completing the posttest. Moreover, although the active participants were instructed to deliver their speech in Japanese, the outline which served as their guide was in English. This meant that they first had to translate the outline into their native language. So the bulk of their short time before speaking was spent on understanding the outline. Some of the subjects expressed annoyance to the experimenters at having to read the directions and outline in English. There seemed to be difficulty in understanding some of the content on the part of the subjects. This was substantiated by posttest interviews with them.

Kikuchi and Gordon pointed out that there is a growing literature reporting studies in which American paper and pencil personality tests have been translated and then used in another culture. It is rare that any mention is made of attempts to determine the adequacy of the translated form beyond the use of back-translation. (17,185) When translating from English to Japanese, and vice versa, there is room for less of meaning and misunderstanding. So wording is crucially important. Moreover, there is room for ambiguity in translating--especially from Japanese to English. For example, the use of negatives in English, such as "shouldn't" or "won't" are difficult for Japanese to understand, so these should not be used. Even though bilingual Japanese assistants aided in developing the wording used in the study, language problems were evident.

In addition to language problems, methodological considerations should include plans to avoid the possibility of experimenter bias. In intercultural experimentation, this threat may exist when an experimenter, who knows little about the culture he is experimenting in, does something which is very unusual or taboo in a given culture. For example, asking Japanese subjects to disclose things about themselves to a strange experimenter just is not done with success. Barnlund found in his research that Japanese were willing to reveal little to strangers. More specificially, he found that Japanese prefer to communicate with few people and not on as deep a level as Americans would. Moreover, Americans would be willing to communicate on a deeper level with strangers than would Japanese. Furthermore, Japanese show an indifference or hostility to strangers and a more limited interaction is encouraged. In addition, Japanese tend to conceal their self attitudes with strangers. (2) The implication here is that if an experimenter is working with Japanese subjects and he employs accepted Western methodology, his results would probably have little validity.

Nakane, the noted Japanese anthropologist, said this:

> The extreme delicacy of demeanour mentioned earlier is chiefly applied to, and functions among, the 'own' group. The Japanese have failed to develop any social manner properly applicable to strangers, to people from 'outside.' In the store of Japanese etiquette there are only two basic patterns available: one which applied to a 'superior' and another which applied to an 'inferior'; or, to put it another way, there are expressions of hostility, but none which apply on the peer level or which indicate indifference. This produces discomfort during contact with a stranger, whether he be foreigner or Japanese. (19,130)

> The Japanese are often thought by foreigners to be very reserved. A more accurate description would be that Japanese on the whole are not sociable. This is partly because, once outside their immediate orbit, they are at a loss for appropriate forms of expression. They have not developed techniques for dealing with persons 'outside,' because their lives are so tightly concentrated into their 'own' groups. Within these groups, the Japanese could not be described as reserved.. (19,130-1)

This experimenter was familiar with the culture, so this kind of experimenter bias was less of a threat to the validity of the study than it otherwise might have been. Another kind was a more distinct threat. Experimenter bias could also be a real possibility due to Japanese adherence to authority and respect status. In this study, the subjects were inclined to follow the directions of the experimenters[1] who, because of their graduate ranking, had higher status conferred upon them by society, and thus authority over subjects. Nakane pointed out that status was the dominant factor in fixing of social order. (19,32) She further cited evidence of status afforded to class ranking in school, which would give the experimenters higher status than the subjects. Subjects would show respect for status and authority by complying with the requests of the experimenters.

Kawasaki reinforced this by saying: "The Japanese attitude toward life, then, is characterized by inertia and by submission to authority, rather than by individual conscience or rational judgement." (16,187) Kawasaki further contended that Japanese conform such that the majority of people act in the same way. Conformity is safe; individuality is negatively reinforced by isolation from the majority. (16,187)

A related threat is the acquiescience effect on the part of subjects. Weick illustrated this problem:

> The aura of compliance in the laboratory stems from several sources: the presumed credibility of the experimenter, his role as an expert, the uncertainty with thich subjects approach experiments, their desire to help science, the fact that experiments are tied closely to classroom work because of requirements for credit, and so forth. Because compliance is pervasive, a distorted view of attitude change often emerges from the laboratory. (in 20,53)

Because of the nature of Japanese people as obedient and compliant, this threat seemed quite plausible. In other words, there might have been a tendency for subjects not to think independently, but to try to behave as

---

[1]Two native Japanese graduate students at ICU conducted treatment/posttest.

they perceived the experimenter wanted them to behave. Experimenter bias can occur in this situation where the expectancies, hypotheses, or biases of the Es are communicated in some fashion to their Ss. (15, 2)

A third consideration in determining whether the methodology is appropriate is to investigate intercultural differences with regards to the variables being studied. In order to test the affects of personal space on attitude change, Hall's distances (intimate and personal) (12) were employed. Personal space theory postulated that as an individual's personal space was violated, the less susceptible he would be to attitude change. (1,265) In order to test the theory of personal space and its effect on attitude change, one distance must be utilized where personal space is violated. It is not the fault of the theory that no significant differences were found, but the fact that Japanese evidently have different proxemic patterns than Americans. This is not to say that Japanese do not express similar actions when their space is violated, only that violation occurs at distances different than those within the American culture. What might be intimate space to Americans might be personal space to Japanese.

Hall has said:

> Until recently man's space requirements were thought of in terms of the actual amount of air displaced by his body. The fact that man has around him as extensions of his personality the zones described earlier has generally been overlooked. Differences in the zones--in fact their very existence--became apparent only when Americans began interacting with foreigners who organize their senses differently so that what was intimate in one culture might be personal or even public in another. Thus, for the first time the American became aware of his own spatial envelopes, which he had previously taken for granted. (12, 118)

Research has suggested that intimate distance in public is not considered proper by adult, middle-class Americans. (12,118) Individuals at this distance would be less susceptible to attitude change because their space would be violated. But with Japanese, this did not happen.[1] The questions

[1]See discussion on precautionary measures taken.

we might ask ourselves are how different are those distances and at which range will personal space be violated? Only by answering these questions can the influence of personal space on attitude change among Japanese be determined.

The other independent variable was type of participation. One reason for finding no significant difference between active and passive participants with regard to attitude change might be due to failure of active participants to immerse themselves in the role to which they were assigned. It might appear that this is a design weakness, but it is more a characteristic of Japanese people. When Japanese interact, they do not immediately address themselves to the issue they have come to discuss. For example, businessmen often play a round of golf or have a few drinks before they even begin to discuss business. Hall (12, 151) pointed out that Americans dealing with Japanese become frustrated because the Japanese never come directly to the point. They talk around it. Because of the nature of the Japanese, they may not have been able to immediately suspend their unrelated thoughts and feelings and immerse themselves into the role. In other words, they were not able to play the role at the exact time it was called for. Because the subjects were only available for a short time it was necessary to run them quickly through the treatment which might have precluded immersion into the role.

After examining the three conditions that existed in this study (language problems, experimenter bias, and intercultural differences with respect to the key variables) it seems that more thorough steps could have been taken to assure that the methodology was appropriate. A number of measures were taken to strengthen the appropriateness of the methodology. These will be discussed along with suggestions for other measures that could have been taken.

First, a pilot study was undertaken to determine if the method of assessing attitudes in the actual study would be appropriate for native Japanese people. It might be that the method of assessing attitudes would inhibit natural behavior. The pretest questionnaire was of major concern. Would the subjects understand the English questionnaire the way it was worded? Moreover, would they be able to understand the scale that was being used to measure attitude change? Would it make sense to them?

By factor analyzing the results of the pilot and through the opinions of several native Japanese speakers and a Japanese social psychologist who previewed the questionnaire (Dr. James Morishima--University of Washington), it was determined that English speaking Japanese would have no trouble understanding the written questionnaire. This was further substantiated through interviews, with subjects participating in the pilot, by a Japanese experimenter. However, the wording of some statements had to be changed before the questionnaires were distributed to the subjects in the actual study in Japan to facilitate understanding of the statements on the part of the subjects.

In order to alleviate the threat of experimenter bias, two Japanese experimenters administered the treatment. If the same experimenter conducted both the pretest and the treatment/posttest, then the threat would exist that subjects may try to recall their initial response to the key issue in order to remain consistent. Moreover, they may feel more unnatural with a foreign experimenter during the treatment. In addition, the two experimenters were not aware of the study's hypotheses and thus would be less likely to communicate the actual hypothese to the subjects.

Two pilot studies were performed to examine the construct of personal space. The first one was conducted primarily to determine what types of methods would be necessary and feasible to control personal space as an

independent variable, since not an abundance of empirical research has dealt with it as such.

The second pilot study on personal space was undertaken to determine if Japanese might react differently than Americans to violation of their personal space. It might be that researchers have not experienced these reactions and thus might not be in a position to control for them.

At the Intercultural Communication Conference in Tokyo, July 7-17, 1972, this very issue was discussed. It was pointed out that Japanese have different dimensions of personal space than Americans, but their reactions to violation of it were not noticeably different. This writer, using a Japanese confederate, tested the reactions of naive Japanese subjects to violation of their personal space and found the same kinds of actions that Americans took.

In addition to the precautions taken to insure that the methodology was sound, several other steps should have been taken. Another pilot study with subjects from the target population could have been run to test for any language problems. The pilot study used to test for this was performed with native Japanese students studying in the United States, and it might be that Japanese who study in this country speak better English and understand the language more thoroughly than the bilingual native Japanese population used in the actual study.

By eliminating or lessening language problems, understanding, on the part of Japanese subjects, of the arguments they were using, could have been enhanced. This would have allowed for more biased scanning--a condition necessary for attitude change through role playing. Moreover, additional time should have been given to allow subjects to immerse into their roles. A pilot study could have been run to decide approximately how much time is needed for immersion into a role.

If role playing has an influence on attitude change, then experimenters should be confident that their subjects are actually role playing. Role playing exercises should allow the subject time to immerse himself in the role--above and beyond the time to familiarize himself with the content of the message he is to deliver. Although this writer is not able to say how much time is needed, intuitively one could reason that in order for role playing to be effective, the subject should be given some leeway to take the time he feels necessary to prepare for the task. It might be that different time elements are necessary for different cultures.

In addition to role playing, Japanese dimensions of space should have been tested to determine what physical distances constitute personal and intimate space for Japanese. Even though this study only attempted to test existing American theories of personal space in another culture, attitude change theory was not really tested as planned because violation of personal space was not evident.

Future research must be embarked upon to establish whether we can generalize our findings. We know that what Americans consider intimate space is not intimate for Japanese. By finding the corresponding proxemic patterns in Japanese culture, and by tightening controls on active--passive participation, the effects of these variables on attitude change can be examined more confidently.

Finally, experimenter bias could have been mitigated by using more experimenters. Rosenthal (in 15,43) pointed out that if we randomly sampled Es just as we did Ss, using several different Es within one experiment would perhaps cancel out the biases of different Es. Often, willing Es aren't as readily available in another culture. In this study experimenter bias could have best been dealt with by using Es whose status was unknown to the subjects. Moreover, the experiment could have been made as "natural" as

possible so as to put laboratory compliance at a minimum. In order to do this, the culture would have to be thoroughly examined. Methods used to make the experimental setting as real as possible for Americans might not work for Japanese.

Aside from the basic problem of examining methodological and theoretical questions and techniques in a different culture, there is the pragmatic problem of carrying out the research. The second precaution is also vitally important to the success of any intercultural research project. In carrying out the research, careful plans must be made to insure the availability of subjects and resources to solicit assistance from qualified researchers in the culture under study. Decision making and timing play a key role in this.

When studying in another culture we do not have the access to subjects as we do in our own country. We cannot just go over there and expect complete cooperation. Our being there might even seem to the culture to be an imposition. We have trouble with our own subjects not liking to have themselves experimented upon. Without free access, we cannot really expect random sampling; we take who we can get and this means less external validity. Often, assistance from people in another culture can bridge this problem, but just as often this assistance is not available.

Often it is difficult to get the commitment of subjects to participate in a study. Moreover, it has been the experience of this writer to lose subjects because of misunderstanding or schedule conflicts. Furthermore, decisions had to be made at a moment's notice, such as where the pretest would be given and what time; what to do if subjects did not understand the directions; and how many subjects would be needed for the study. Researchers should concentrate on having all decisions made prior to the administering of the experiment. Moreover, alternative plans must be made for every decision in case original plans go awry. Enough time should be set aside to

make any last minute changes. It has also been the experience of this writer that what might take one or two days to accomplish in this country, would usually take a week or more in Japan. For example, having materials typed and copied in this country is a relatively simple task and often can be done in a day or two. This writer had the experience of searching three days for a typewriter and waiting another four days for material to be copied. But that was minor compared to the surprise and shock of finding subjects gone on summer vacation when they were to be available for the experiment. Language and cultural differences are prevalent when working and living in another country. Perhaps the best advice is to solicit assistance from researchers in the other culture in advance. Even though precautions are taken, situations may arise that have not been anticipated. When working in another culture, one must expect the unexpected.

Fortunately this writer had access to Japanese subjects within their own cultural setting. This is advantageous from the point of view that it would be more difficult to generalize the results of this study to Japanese people if the subjects were comprised of Japanese people in the United States. The director of the communications department as well as several administrators of the university assisted this writer by offering student subjects and facilities. Finally, there was available personnel to help with the research. These included the director of the communications department, Dr. John Condon, and several Japanese professors and graduate students. Because of language problems and cultural traits, these competent researchers were needed to help carry out the study.

In deciding upon what precautionary measures to take, one pragmatic point must be discussed. Often it is necessary to make one decision at the expense of another. For example, because this experiment was run in another culture, and because two variables (personal space and type of participation)

were being studied together for the first time, this writer felt control was extremely important. But while control measures might strengthen the internal validity of the study, the threat of experimenter bias is also increased. A related example involved the use of two Japanese experimenters to administer treatment and posttest. While this measure might make it more difficult for Ss to associate the pretest (conducted by this writer) and the posttest so as to remain consistent in their responses to the key attitude items, this writer could not witness any demand characteristics that might have occurred in the treatment or posttest. This is a real dilemma--a situation requiring choosing between alternatives that increase certain strengths in validity, while decreasing others. Thus the experimenter must decide which alternatives will best suit his particular needs and he must be willing to lose some strengths in order to gain others.

In this paper, it has been suggested that in attempting to generalize existing findings to another culture, one must take precautions to insure that methodological and practical considerations have been adhered to. The phenomena for which the theories hold must be firmly established. By considering the precautions suggested in this paper, it might be possible to build a theory which would be strong in parsimony and utility, and perhaps even able to account for the variables of type of participation and personal space. As we meet the conditions of the theory and as we replicate the study, the variables which affect attitude change in our culture could be tested in Japan to see if generalization is tenable, and to what degree and under what conditions it is tenable. Then more variables which operate in the attitude change process could be built into the design and the base of the theory could be broadened to include more phenomena.

Once these precautions are considered, they can be extended to other cultures and other conditions and researchers can gain a better understanding of how the same variables operate in different cultures, or even if they do. Moreover, these precautions can help promote a more reliable and valid end product.

REFERENCES

(1) Albert, Stuart and James M. Dabbs, jr. "Physical Distance and Persuasion," Journal of Personality and Social Psychology, Vol. 15, No. 3, 1971, 265-270.

(2) Barnlund, Dean C. Lecture on Intercultural Communication at Intercultural Co-munication Conference, Tokyo, Japan, July 10, 1972.

(3) Berrien, Kenneth, "Japanese vs. American Values," Journal of Social Psychology, Vol. 65, 1965, 181-191.

(4) Bracht, Glenn H. and Gene V. Glass. "The External Validity of Experiments," American Education Research Journal, Vol. 5, 1968, 437-474.

(5) Brashen, Henry M. "The Effects of Counterattitudinal Role Playing, Passive Participation, and Two Variations of Personal Space Upon Attitude Change Among Japanese," Ph.D. Dissertation, University of Washington, 1973.

(6) Caudill, William and Takee Dei. "Interrelations of Psychiatry, Culture, and Emotion in Japan," in Iage Goldstein, ed. Man's Image in Medicine and Anthropology, International University Press, 1963.

(7) Caudill, William and Harry Scarr. "Japanese Value Orientations and Culture Change," Ethnology, Vol. 1, 1962, 53-91.

(8) Elms, Alan C. and Irving L. Janis. "Counter-norm attitudes induced by consonant versus dissonant conditions of role-playing," Journal of Experimental Research in Personality, Vol. 1, 1965, 50-60.

(9) Festinger, Leon A. and J. Merrill Carlsmith. "Cognitive Consequences of Forced Compliance," Journal of Abnormal and Social Psychology, Vol. 58, 1959, 203-210.

(10) Foa, Uriel. "Cross-Cultural Similarity and Difference in Interpersonal Behavior," Journal of Abnormal and Social Psychology, Vol. 68, No. 4, 1964, 517-522.

(11) Hall, Edward T. "A System for the Noteation of Proxemic Behavior," American Anthropologist, Vol. 65, 1963, 1003-1026.

(12) Hall, Edward T. The Hidden Dimension. Garden City: Doubleday and Co., Inc., 1966.

(13) Hall, Edward T. The Silent Language. Greenwich Conn.: Fawcett Publication, inc., 1959.

(14) Janis, Irving L. and Bert King. "The Influence of Role Playing on Opinion Change," Journal of Abnormal and Social Psychology, Vol. 49, 1954, 211-218.

(15) Jung, John. The Experimenter's Dilemma. San Francisco: Harper and Row Publishers, 1971.

(16) Kawasaki, Ichire. Japan Unmasked. Rutland Ve: Charles E. Tutle, Co., 1969.

(17) Kikuchi, Akie and Leonard V. Gordon. "Evaluation of Cross-Cultural Application of a Japanese Form of the Survey of Interpersonal Values," Journal of Social Psychology, Vol. 69, 1966, 185-195.

(18) King, Bert and Irving L. Janis. "Comparison of the effectiveness of improvised vs. nonimprovised role playing in producing opinion changes," Human Relations, Vol. 8, 1956, 177-186.

(19) Nakane, Chie. Japanese Society. Berkeley: University of California Press, 1972.

(20) Sherif, Carolyn W. and Muzafer Sherif. Attitude, Ego-Involvement, and Change. New York: John Wiley and Sons, Inc., 1967.

(21) Sommer, Robert. Personal Space, The Behavioral Basis of Design. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1969.