

**THE NECESSITY OF A DISTINCTION BETWEEN GROUP AND
TOGETHERNESS IN STUDIES ON CONFORMITY**

By

ROBERT LEW MONTGOMERY

Bachelor of Arts

Bethany College

Bethany, West Virginia

1964

**Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the degree of
MASTER OF SCIENCE
May, 1967**

THE NECESSITY OF A DISTINCTION BETWEEN GROUP AND
TOGETHERNESS IN STUDIES ON CONFORMITY

Thesis Approved:

Nicholas P. Pollis

Thesis Adviser

William H. Bamber

David J. Ford

D. D. Susman

Dean of the Graduate College

JAN 16 1968

ACKNOWLEDGMENT

My sincere thanks is expressed to all those who have made this study possible. Indebtedness is acknowledged to Drs. William W. Rambo and Donald J. Tyrrell for their valuable guidance and assistance. A particular debt is owed to Dr. Nicholas P. Pollis, without whose insight, vision, and encouragement this study would not have been accomplished. Finally, I would like to express extreme thanks to Dr. Muzafer Sherif who made this study financially possible with a research grant arranged through the Research Institute at the University of Oklahoma, Norman, Oklahoma.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.	1
The Problem.	1
Purpose of the Study	3
II. REVIEW OF THE LITERATURE.	5
Studies Manipulating Togetherness Variables.	6
Studies Manipulating Group Variables	7
Studies Manipulating Group and Togetherness Variables.	8
Implications of the Review of the Literature	9
Comparison of This Study to Previous Studies	12
Predictions of the Study	13
III. METHOD AND PROCEDURE.	14
Subjects	14
Procedure.	16
IV. RESULTS OF THE EXPERIMENT	18
V. INTERPRETATION OF RESULTS	22
Summary and Conclusions.	22
Implications for Future Research	24
BIBLIOGRAPHY	27
APPENDIX	29

LIST OF TABLES

Table	Page
I. Design of the Experiment.	17
II. Mean Stability Score Values and r_p , R_p Values for 2 and 3 Groups.	19
III. Mean Variability Score Values and r_p , R_p Values for 2 and 3 Groups.	20

CHAPTER I

INTRODUCTION

The Problem

It is contended by the author that much of the confusion in the area of conformity and its relationship to group cohesion lies in the lack of an operationally clear definition as to what one means by the term "group." Some experiments in conformity use a collection of individuals who have had no previous normative or organizational relationships; other experiments use subjects who have had a previous history of normative and organizational relatedness. It is the author's contention that these situations involve different experiential and behavioral parameters; and, for this reason, it might not be useful to extrapolate the findings from one set of studies to those of another.

Further, in terms of "real life" situations, one might expect these parameters to be different. For example, if an individual and a very close friend form an opinion or norm toward another person, group, institution, or place, it would be expected that this newly learned norm might be a far weightier determinant in that person's future behavior toward those relevant stimulus items than would the same norm formed in the process of interaction with a complete stranger. In the former case, this could be predicted on the basis of a past history of social interaction of the individuals in relation to

problems that have had motivational significance for them, whereas no such history of interaction would exist in the latter situation.

If these contentions are correct it might be more theoretically and methodologically profitable to restrict the term "group" to those situations in which the subjects involved have had previous histories of normative and organizational relatedness and to use a second term, "togetherness", to refer to those situations in which subjects have not had a history of such interaction.

Theoretical counter-parts for such a notion might lie in a three point continuum ranging through group, togetherness, and alone social stimulus situations. The points on this continuum may be defined in the following manner: (a) the individuals in a group situation are interacting as members of a delineated group structure with specified status and role relationships to one another, and with certain shared expectancies toward each other while forming norms in any new learning situation at hand; (b) in the togetherness situation, the interacting individuals are complete strangers and thus do not have stabilized status and role relationships, nor do they have any stabilized expectancies toward each other in the new learning situation at hand; (c) in the alone situation, an individual is in the process of norm formation by himself, hence other than an awareness of the experimenter's presence, no relationships or expectancies toward others are available if the stimulus material is socially neutral and ambiguous in nature.

If, as has been suggested, historically established normative and organizational patterns, group (G), are qualitatively different from situationally actuated relatedness, togetherness (T), then it

would be expected that norms established under G conditions would be conformed to more than norms established under T conditions, In addition, it is expected that norms established under T conditions would be conformed to more than norms established alone (A). Some social support in the process of establishing a norm in relation to ambiguous stimuli is more effective than none.

If the theoretical assumptions posited have some validity, then it is expected that in a retest situation of conformity to a newly formed norm, subjects will demonstrate greater conformity in the order $G > T > A$.

Purpose of the Study

The primary purpose of this study was to provide an empirical check on the utility of making a distinction between "group" and "togetherness" stimulus situations in studies on conformity. The classic autokinetic effect (see Sherif, 1935) was utilized because it can be taken as representing a new learning situation in which learning is defined as a relatively permanent change in behavior as a function of practice. Rohrer, Baron, Hoffman, and Swander (1954) have found the persistence of autokinetic norms formed in social interaction for periods of up to a year after a single norm formation session.

This study consisted of two sessions: A first session in which subjects learned a new norm, and a second session in which conformity to a newly learned norm was measured. In the first session, three different stimulus conditions were contrived of alone, togetherness, and group in which the experimenter initially anchored all subjects

on a range of 2 to 5 inches. In the alone situation, naive subjects established a norm alone. In the togetherness situation, naive subjects established norms with a stranger. In the group situation, subjects established norms with a fellow group member. In a second session, subjects from all three conditions returned alone on the following day in order that conformity to the previously established norm might be determined.

CHAPTER II

REVIEW OF THE LITERATURE

Festinger (1950) has proposed that the more cohesive a group (i.e. he makes no distinction between group and togetherness), the greater the conformity of the members to the group standard. Festinger, et al., have equated group cohesion (1950) with the attractiveness of the group to its members, an obviously arbitrary conceptualization, as has been pointed out by Eisman (1959) and Ramuz-Nienhuis and Van Bergen (1960).

Findings relevant to cohesion theory, though often presented as confirmatory, are in fact unconvincing. Festinger, et al. (1950) failed to find a significant relationship between group cohesion and adherence to a group norm except when employing a dubious ad hoc modification of the original cohesion measure. Back (1951) did not find consistently significant differences in influencability contingent upon differential attraction to the group. Schacter (1951) demonstrated a relationship between cohesion and rejection of deviates employing a sociometric criterion, but failed with a role-assignment criterion. Schacter, et al. (1951) reported a relationship between cohesion and adherence to a norm of decreased productivity, but failed with a norm of increased productivity.

A review of contemporary research relevant to the relationship between conformity and group cohesion may be meaningfully divided

into the three types of cohesion variables manipulated in studies: togetherness, group, and studies manipulating both group and togetherness variables simultaneously within the confines of a single study.

Studies Manipulating Togetherness Variables

Attractiveness to a group was manipulated experimentally by Festinger, et al. (1952) in a togetherness situation. High attraction to a group was created by telling subjects that the group had been composed so that they would like each other and get along well; low attraction was established by telling subjects that the composition of the group was such that they might not like each other. Results showed that more persons whose opinions differed from the alleged group concensus changed toward the majority position in the high than in the low attraction-to-group condition. The difference was, however, only marginally significant.

Downing (1958) reported failure to obtain greater induction of the autokinetic effect in laboratory defined high cohesive and low cohesive groups in a test of Festinger's theory of cohesiveness and suggested that the power of the group to influence its members was probably restricted to those situations in which cultural influences permitted such influence.

Moran (1965) obtained negative results in an experiment in which subjects estimated the length of lines in an experimentally defined high cohesive and low cohesive condition. He concluded that the reason that these conditions often lack empirical support may be partially an artifact of oversimplified operationalization of a multi-dimensional concept.

Sampson and Insko (1964) report one of the few experiments in which significant differences occurred between high cohesive and low cohesive togetherness groups. In this experiment a paid actor interacted with naive subjects over a period of time in either a very positive or negative manner.

Studies Manipulating Group Variables

Several other studies have used natural groups instead of togetherness or laboratory groups. The advantage of using natural groups is that, as a consequence of long acquaintance, group attraction is likely to be much stronger than attraction produced by instructions given in the laboratory.

Lott and Lott (1961) studied the relation of conformity and group attraction in fifteen natural friendship groups. Ratings of mutual liking among members of groups and attractiveness of a group as a whole constituted the operational definition of group attraction. Changes of opinion toward the reported group position was significantly correlated (.54) with group attraction for these groups of college students.

Bevard (1953a) asked subjects to rate their group as a whole on an 11-point scale ranging from extreme dislike to extreme liking in order to measure attraction for a group. He then got measures of conformity by having subjects estimate the number of dots in a square after hearing their group average. Correlation between liking for a group and conformity was a negligible -.05.

The relation of group attraction and "compliance" has been studied in the Asch situation by Harper and Tudenham (1964). Results

showed no significant differences in amount of conformity on visual perceptual items among three types of friendship groups (close, distant, mixed). Another study using extreme norms found no differences between "liked" and "disliked" groups in conformity on a click counting task (Wilson, 1960). On attitude judgment there was more yielding in the liked than in the disliked groups for personality traits, but not for all subjects.

Studies Manipulating Group and Togetherness Variables

Other studies manipulate the dimensions of laboratory groups (T) and natural groups (G) simultaneously. For example, greater conformity has been found in groups of acquaintances than in groups of strangers (Lambert & Lowy, 1957; Thibaut & Strickland, 1956). Similarly, greater conformity has been found in stable groups as compared to temporary groups or "togetherness situations" (Bovard, 1951; Bovard, 1953a; Pollis, 1964; Pollis & Montgomery, 1966).

Bovard (1951) used two classroom situations, each having different techniques of teaching. One class had a "group-centered" instructional approach, and one had the more traditional "teacher-centered" approach. The chief difference between these two methods was in the amount of verbal interaction permitted among the students. One type of instruction allowed interaction between individuals so that group formation was possible. The other restricted interaction between individuals. A total of 504 subjects in 30 different classes made individual estimates of the length of a green rectangle. They were informed of the judgments of others in their class and then were asked to make individual judgments again. The results showed differ-

ences in the extent of convergence toward a common norm in the two types of interaction situations. Convergence was greater in the situation which had permitted the most interaction among individuals.

In another study, Bovard (1953b) obtained estimates of the number of dots on a card containing 500 dots as was done in the previous study reporting negative results (1953a). This time, however, organized group units of considerable stability and members of temporary "togetherness" situations were compared. Once again, convergence was greater in groups with stabilized relationships than in the transitory "togetherness" situations.

Implications of the Review of the Past Literature

As the foregoing review indicates, studies of group attraction and conformity are not without contradictory results. One source of conflicting results may lie in a lack of distinction between the dimensions of "group" and "togetherness" social stimulus situations. Once this distinction is made, the experimental evidence may be evaluated in terms of the following three types of experiments:

1) Studies in which experimentally defined groups (T) subjects, are used. All of the studies reviewed report negative results (for example, Festinger, et al., 1952; Downing, 1958; Moran, 1965), except for the one lone study of Sampson and Insko (1964) which differs from the other experiments in that a "confederate" of the experimenter interacted with naive subjects over a period of time.

2) Studies in which natural groups (G) subjects, are utilized. Evidence here is mixed. Lott and Lott (1961), for example, report positive evidence and Bovard (1953a) reports negative evidence.

3) Studies in which both "togetherness" and "group" subjects are utilized simultaneously in the same experiment, and the results of each are compared directly with each other. All of these studies report positive results (examples are Lambert & Lowy, 1957; Thibaut & Strickland, 1956; Bovard, 1951; Bovard, 1953b; Pollis, 1964; Pollis & Montgomery, 1966).

On the basis of this past experimental evidence, it would seem that two different experiential and behavioral parameters of group and togetherness are the important ones, rather than group experiments considered singly, or togetherness experiments considered singly. In other words, the two levels of low cohesion and high cohesion in an experiment in which all subjects are members of a group (i.e., they have previous normative and organizational relatedness) or in which all subjects are members of a togetherness situation (i.e., they are strangers) may be too similar in level of attraction to affect conformity differentially. Further, it might not be useful to extrapolate the results of one set of studies to those of another when the basis of comparison involves the different parameters of "group" and "togetherness". The purpose of the present study was to provide experimental evidence for the necessity of making such a distinction.

Two past studies (Pollis, 1964; Pollis & Montgomery, 1966) provide relevant evidence in that the main independent variable was the distinction between "group" and "togetherness" social stimulus situations. On the basis of sociometric analysis made prior to the experiment, Pollis (1964) assigned subjects to alone, togetherness, and group conditions in a collective interaction situation. The stimulus material consisted of a psycho-physical non-social ambiguous tape

recording. During the first session, subjects in the three conditions were anchored on different ranges. Following this, all subjects were scheduled for a second session so that each subject made judgments in response to the same ambiguous series of sounds in the presence of two other subjects. All three subjects for each Session II defined an ATG arrangement. That is, Session I social condition backgrounds were always combined in every Session II so that an alone (A), togetherness (T), and group (G) subject would always be present. Scale stability was found to be greater in the order $G > T > A$, and the ability of subjects to influence the judgment of others in the order $G > T > A$. Variability of estimates was predicted to be of the order $A > T > G$. Results substantiated $A > T$ and $A > G$, but $T > G$ was not statistically significant.

In the second study, Pollis and Montgomery (1966) assigned subjects to their respective experimental groups on the basis of prior sociometric analysis; and the autokinetic effect was utilized in a Solomon Asch "compliance" situation. In the first session, subjects in each of the three conditions of ATG were anchored through instructions by the experimenter to see the light move 2 to 5 inches. Following this, all group subjects returned for a second session with their original group partner, all togetherness subjects returned with their original stranger partner, and subjects in the alone condition were combined with another alone subject. Each pair of naive subjects faced a planted majority of three experimental "confederates" who made estimates on a planned sequence that fell within a range of 7 to 10 inches. The main dependent variable was the number of times each subject left his original range. Significant differences were found in

the order of A>T>G. Significant differences were also found in the amount of variability from estimate to estimate in the order of A>T>G.

Comparison of This Study to Previous Studies

In the latter two experiments (Pollis, 1964; Pollis & Montgomery, 1966) the following two experimental sessions were utilized:

1) In the first session a norm was internalized through verbal anchoring by the experimenter and through interaction with other subjects in which varying amounts of previous normative and organizational relatedness had been controlled for by assigning subjects to the conditions of ATG through prior sociometric assessment.

2) Conformity to this previously internalized norm was measured in a second session by placing the subject's norms under constant stress.

a. Pollis (1964) scheduled subjects for Session II in sets of threes, so that all 3 subjects for each Session II defined an ATG arrangement.

b. Pollis and Montgomery (1966) had naive subjects return with their previous partners in the G and T conditions, and combined each A subject for a second session and previous norms were undermined by three plants.

The present study was identical to the Pollis and Montgomery (1966) experiment in the first session. Subjects formed norms in either an alone, together, or group social stimulus situation, and the experimenter anchored subjects on a 2 to 5 inch range through instructions in the autokinetic situation. This anchoring procedure

was similar to that used by Pollis (1964), although he used ambiguous sound stimuli rather than the autokinetic effect.

In the second session, however, the present study differed from the previous two. One difference was that all subjects returned alone. Pollis (1964) had subjects combined in an ATG arrangement. Pollis and Montgomery (1966) had subjects in G and T conditions return with their previous partners and combined pairs of A subjects. A second difference was that variability was thrown into the subject's estimates through instructions by the experimenter. It was suspected that this procedure would give a relatively "purer" measure of conformity in the second session with regard to the norm established during the first session, without the interacting effects of the experimenter's planted majority or the presence of other naive subjects.

Predictions of the Study

Predictions of the study were as follows:

1) During the first session subjects would establish norms of their own under alone, togetherness, and group social conditions, where the end points were initially anchored by the experimenter.

2) Effects of instructions during the second session would be greatest for alone condition subjects, less for togetherness social condition subjects, and least for group social condition subjects in terms of the number of times subjects would leave their pre-established ranges.

3) Variability of judgments from trial to trial would be greatest for alone social condition subjects, less for togetherness subjects, and least for group social condition subjects.

CHAPTER III

METHOD AND PROCEDURE

Subjects

Sixty naive subjects were selected from 13 different sections of introductory psychology at Oklahoma State University. Twenty subjects were assigned to each social condition on the basis of sociometric findings so that (a) each of the G subjects went through Session I with a fellow group member; (b) each of the T subjects went through Session I with a stranger; and (c) each of the alone subjects went through Session I without a partner. The sociogram employed was devised by Nicholas P. Pollis and appears in the Appendix. It was given in each of the 13 sections of introductory psychology four weeks prior to the beginning of the experiment in order that no connection would be made between the sociogram and the experiment.

The following criteria were employed in selecting pairs of group subjects on the basis of responses made on the sociogram:

- (a) All group subjects listed each other as either first or second choice on item number 1 on the sociogram when asked, "Whom do you like the most?".
- (b) All group subjects selected each other as first choice on item 2 when asked, "If you had to depend on a friend's judgment in a difficult situation, who would you trust first?".

(c) All group subjects selected each other as first, second, or third choice on item 3 when asked, "If you were giving a party (money and location no problem) who would you like to invite?".

(d) All group subjects selected each other as first, second, or third on item 4a when asked, "If campus civil defense units were created, and you were a part of it, of your friends, from whom would you be willing to take orders?".

(e) All group subjects did not select each other as first or second choice on item 4b which asked, "Of your friends, with whom would you be willing to work with but only if you gave the orders?".

(f) All group subjects did not select each other as either first or second choice on item 4c which asked, "Of your friends, with whom would you not be willing to work with? List in order of rejection."

(g) All group subjects listed each other as either first or second choice on item 5 which told subjects to list students that they considered to be friends, then draw a line, and list students who are acquaintances.

In order to insure that togetherness subjects would not know each other, the following criteria were employed for the T condition:

(a) They did not list each other on the sociogram as being either a friend or an acquaintance. (b) They were in different sections of introductory psychology. (c) They lived in housing units located on opposite ends of the campus. (d) At the end of the second session, the experimenter asked them if they knew each other. If not, he promptly introduced them to each other. (None of the subjects knew each other prior to the experiment).

Procedure

During Session I scales of 2 to 5 inches were established for all subjects. This was accomplished through verbal anchoring by the experimenter prior to the subjects making any estimates, a procedure used by Pollis and Montgomery (1966). A subjects established their norms alone, T subjects established their norms with a stranger, and G subjects established their norms with a fellow group member. A total of 30 estimates for each subject were recorded by the experimenter. As close to 24 hours later as possible, all subjects returned alone for Session II in order that conformity to the previously established norm might be determined. Twenty estimates were obtained in Session II for each naive subject.

In both Sessions, naive subjects sat 15 feet from the auto-kinetic apparatus. A three second interval existed between the subject pressing his key and light off-set. A thirty second interval existed between light off-set and the next light on-set.

Instructions for Session I were as follows:

When the room is completely dark, I will give you the signal "ready", and then show you a point of light. After a short time the light will start to move. It will move anywhere from a distance of 2 to 5 inches. As soon as you see it move, press the key. A few seconds later the light will disappear. Then tell me the distance it moved.

After answering any questions, the following parts of the instructions were reread:

After a short time the light will start to move. It will move anywhere from a distance of 2 to 5 inches. As soon as you see it move, press the key. A few seconds later the light will disappear. Then tell me the distance it moved.

Variability was introduced into naive subjects estimates in

Session II through the use of the following instructions:

Today, we are going to further test your ability to discriminate. Yesterday, the distances were 2 to 5 inches. Today, a few will be 2 to 5 inches, but many will be different.

The following part of the instructions was then repeated:

A few of the distances will be 2 to 5 inches, but many will be different.

In order to collect data from naive subjects for each of the social conditions, a total of one hundred separate experimental sessions (including both Sessions I and II) were run. The design of the experiment is represented in Table I.

TABLE I
DESIGN OF THE EXPERIMENT

	Session I			Session II			
Social Condition	A	T	G	A	T	G	
# Subjects	20	20	20	# Subjects	20	20	20
# Subjects Per Session	1	2	2	# Subjects Per Session	1	1	1
# Sessions	20	10	10	# Sessions	20	20	20

CHAPTER IV

RESULTS OF THE EXPERIMENT

As expected on the basis of previous work done by Pollis and Montgomery (1966), an inspection of each subject's last 20 estimates in Session I revealed that anchoring subjects to scales of 2 to 5 inches was not a difficult process. Session II constituted the source of crucial data in which all subjects returned alone. Subject responses were recorded in each of the experimental situations in terms of each subject's estimate of the distance in inches of light movement.

All estimates of distance falling within the original range of 2 to 5 inches were cumulated for each subject. This constituted the subject's stability score. Stability scores were basic to testing the relative conformity to the established norms. Chi-square goodness of fit and maximum F - ratio tests showed non-violation of assumptions of normality and homogeneity of variance. Overall analysis of variance was significant beyond the .01 level, cross checking the appropriateness of using Duncan's multiple-range test. Table II¹ summarizes results using Duncan's range test in which \bar{X} represents mean stability score values for A, T, and G; r_p represents the least significant

¹For a discussion of the table format employed here with regard to Duncan's Range Test see Frank J. McGuigan, Experimental Psychology, Englewood Cliffs: Prentice-Hall, 1960, p. 176.

standardized range values taken from Duncan's tables; and R_p (standard error of a mean multiplied by r_p) represents the least significant range of the distance between any two means among the ordered means A, T, and G. Mean stability scores for G,T,A are 17.85, 14.35 and 12.30, respectively. Duncan's Range Test shows $G > T$ to be significant beyond the .01 level, and $T > A$ to be significant beyond the .05 level.

TABLE II

MEAN STABILITY SCORE VALUES AND r_p , R_p VALUES
FOR 2 AND 3 GROUPS d.f.=57

	Social Condition			Number of Groups	
	A	T	G	2	3
\bar{X} :	12.30	14.35	17.85		
				r_p 3.76	3.92*
				R_p 2.38	2.48
				r_p 2.83	2.98**
				R_p 1.79	1.89

* Significant at the .01 level

** Significant at the .05 level

These results warrant the generalization that when autokinetic norms, anchored by the experimenter, are established under differing conditions of A,T,G as defined by the conditions of this experiment, and there is a subsequent test of conformity to these norms when all subjects are brought back alone: (1) norms established under group conditions are conformed to more than norms established under together and alone conditions; (2) norms established under together conditions are adhered to more than norms established under alone conditions but less adhered to than norms established under group conditions; (3)

norms established under alone conditions are adhered to less than norms established under together and group conditions.

Consistent with Pollis and Montgomery (1966) and as indicated in the predictions of the study, a concomitant aspect of greater conformity (defined by the relative frequency of adhering to the original norm) should be the greater variability expressed from judgment to judgment as measured by the distance moved from trial to trial. Accordingly, a variability score was computed for each subject. This score was based on the total distance each subject moved from estimate to estimate during Session II divided by the total number of estimates. The prediction is that variability will be of the order $A > T > G$.

Again, Chi-square goodness of fit and maximum F-ratio tests showed non-violation of assumptions of normality and homogeneity of variance. Also, overall analysis of variance was significant at the .01 level, again cross checking the appropriateness of using Duncan's multiple-range test. The Duncan's Range Test results are summarized in Table III.

TABLE III
MEAN VARIABILITY SCORE VALUES AND r_p , R_p VALUES
FOR 2 AND 3 GROUPS d.f.=57

Social Condition						
	A	T	G		2	3
\bar{X} :	1.60	1.44	1.07	r_p	2.83	2.98*
				R_p	.31	.33

* Significant at the .05 level

Results are in the predicted direction. Mean differences can be

properly ranked in the order $A > T > G$. However, while $T > G$ is significant at $P < .05$ level, and $A > G$ is significant at $P < .01$ level, $A > T$ is not significant at the $.05$ level. One possible reason for the lack of significant differences between A and T may be due to a lack of sensitivity on the part of the variability score as a dependent measure. Pollis (1964) obtained significant differences between T and A and G and A, but not between G and T, using variability scores as a dependent measure. Using stability scores as a measure, as we also have done (Table II), he found all differences significant on the $.01$ level. Pollis and Montgomery (1966) obtained significant differences between A and T, and T and G, but only on the $.05$ level using variability scores as contrasted to the $.01$ level using stability scores. Thus, results of past experiments using the variability measure seem to indicate that it might not be as sensitive as using the stability score as the dependent measure.

Since the main interest in this particular experiment is in the difference between G and T, and this difference is significant, these results warrant the following generalization: when autokinetic norms, anchored by the experimenter, are established under differing social conditions A, T, G, and there is a subsequent test for conformity to this norm in a second session as defined by the conditions of this experiment, then variability of estimates is greater in the order of $A > T > G$. The findings that $T > G$ and $A > G$ are statistically significant. The finding that $A > T$ is not statistically significant.

CHAPTER V

INTERPRETATION OF RESULTS

Summary and Conclusions

To demonstrate the need for drawing a distinction between group social stimulus situations and the coming together of strangers in studies on conformity and its relationship to group cohesion, the relative conformity to autokinetic norms established under alone (A), together (T), and group (G) conditions was investigated. Two sessions were employed. In Session I, three different stimulus conditions were utilized of A, T, and G in which the experimenter initially anchored all subjects on a range of 2 to 5 inches. In Session II, subjects from all three conditions returned alone in order that conformity to the previously established norm might be determined.

Under the conditions of the experiment, main findings may be summarized as follows:

1. Inspection of the data showed establishment of a 2-5 inch scale for all subjects during Session I. This constitutes a successful anchoring of all naive subjects to the desired scale, as that scale was internalized under the different social conditions A, T, G.

2. Individuals with norms established under different social conditions (alone, together, and group) maintain their relative positions differentially in a subsequent test of conformity to their established norm.

3. As conformity to a social norm was differentially affected by different social conditions in this experiment, this research provides evidence for the utility of a distinction made in "group" and "togetherness" social stimulus conformity studies.

That is, there were consistent significant differences in the conformity to norms when comparing G and T social conditions, which indicates that different experiential and behavioral parameters were actuated. It is posited that these differences are basic and important enough to suggest that it might not be useful to extrapolate the findings of conformity to a "group" norm to those studies in which conformity to a "togetherness" norm is investigated.

In addition, these obtained findings of differential patterns of conformity provide additional evidence for acceptance of the proposal made by Pollis (1964) and Pollis and Montgomery (1966) that the term "group" should be employed only in reference to an established normative and organizational social system, and not to situations in which strangers are interacting or in which a researcher has brought unrelated individuals together for purposes of an experiment.

The finding that norms generated under group social conditions change less than norms achieved under togetherness social conditions suggests that in "real life", group related standards or norms will undergo less displacement at the individual judgmental level than those same standards or norms achieved on the basis of togetherness interaction. Similarly, the finding of greater variability in the order $A > T > G$ suggests that the experiential uncertainty is in part a function of the social conditions extant in the previous original learning situation (in ATG) terms where the stimulus material was

originally socially neutral.

Further, these results seem to indicate the utility of envisioning a continuum of ATG as Pollis (1964) has suggested. Subjects in "group" studies could be placed somewhere on this suggested alone-togetherness-group continuum; that is, differentiated in togetherness-group terms prior to research. This will allow for a common point of reference and findings will have more precise and specific extrapolation and generalization power. Definitional and operational agreement on the term "group" along historic lines would establish a "common-language" framework for investigating the relationship between group cohesion and conformity.

Implications for Future Research

An obvious implication for future research is a consideration of the relative merits of a distinction between group, togetherness, and alone dimensions in conformity studies, as compared to the relatively arbitrary conceptualization of high cohesiveness and low cohesiveness. For example, studies that manipulate various indexes of high cohesion and low cohesion (Bovard, 1953a; Downing, 1958; Moran, 1965; Festinger, et al., 1952) have yielded an amazingly large preponderance of negative results. Studies that have manipulated the dimensions of "group" and "togetherness" either unwittingly (Bovard, 1951; Bovard, 1953b; Thibaut & Strickland, 1956; and Lambert & Lowy, 1957) or intentionally (Pollis, 1964 and Pollis & Montgomery, 1966) have yielded positive results. Perhaps, the conditions being compared in the negative instances may be too similar in level of attraction to affect conformity differentially.

The finding that conformity was greater in the order of G>T>A would also seem to contradict the conclusions reached by Downing (1958) and Harper and Tuddenham (1964). They concluded that the power of a group to influence its members was probably restricted to situations in which socially relevant variables such as opinions about labor disputes (Festinger et al., 1952) or productivity variables (Berkowitz, 1954) were utilized, whereas experiments using perceptual judgmental tasks may be unaffected by emotional relationships among members. The results of this study, in addition to three others (Sampson & Insko, 1964; Pollis, 1964; and Pollis & Montgomery, 1966) seem to contradict this conclusion in that all four used perceptual judgmental tasks and obtained positive results.

These seemingly inconsistent results might be explained in the following manner. Although, the stimulus in the autokinetic situation consists of a universal phenomena, Downing (1958) and Harper and Tuddenham (1964) are justified in suggesting that it has no socio-cultural or normative specific stimulus value. It can, however, take on extreme sociocultural or normative relevance if the experimenter decides to bring these factors into the situation and actively manipulate them under controlled observation. In this particular study, as well as others reporting positive results, the norms were made highly relevant by having an initial norm formation stage (Session I) in which subjects establish norms under varying degrees of relatedness. The implication of this for future study is that it might be useful to first have an initial norm formation stage in order that the norms in question have a chance to become relevant for the group being studied.

A final implication for future study in perceptual-judgmental studies is that of anchoring subjects to a norm or range as compared to not anchoring them. For example, Bevard (1948) mentions high intra-subject variability in the ranges within subjects as a function of individual differences. That is, variability in the ranges within subjects may be so great as to obscure the independent variable of the social conditions between subjects. Downing (1958) and Harper and Tuddenham (1964) have mentioned this problem. These problems of individual differences may be circumvented in some cases by transforming the data. If this does not seem practical, however, it is possible to anchor all subjects on the same scale as was done by Pollis (1964), Pollis and Montgomery (1966) and in this study.

BIBLIOGRAPHY

- Back, K. W. "The Exertion of Influence Through Social Communication." J. of Abnormal and Social Psychology. Vol. 46, 1951, 9-23.
- Berkowitz, L. "Group Standards, Cohesiveness, and Productivity." Human Relations, Vol. 7, 1954, 509-519.
- Bovard, E. W., Jr. "Social Norms and the Individual." J. Abnormal and Social Psychology. Vol. 43, 1948, 62-69.
- Bovard, E. W., Jr. "Group Structure and Perception." J. of Abnormal and Social Psychology. Vol. 46, 1951, 398-405.
- Bovard, E. W., Jr. "Conformity to Social Norms and Attraction to the Group." Science, Vol. 118, 1953a, 598-599.
- Bovard, E. W., Jr. "Conformity to Social Norms in Stable and Temporary Groups." Science, Vol. 117, 1953b, 361-363.
- Downing, J. "Cohesiveness, Perception, and Values." Human Relations, Vol. 11, 1958, 157-166.
- Eisman, B. "Some Operational Measures of Cohesiveness and Their Correlations." Human Relations. Vol. 12, 1959, 183-189.
- Festinger, L. "Informal Social Communication." Psychological Review. Vol. 57, 1950, 271-282.
- Festinger, L., Schacter, S., and Back, K. Social Pressures in Informal Groups. New York: Harper, 1950.
- Festinger, L., Gerard, H. B., Hymovitch, B., Kelley, H. B., and Raven, B. "The Influence Process in the Presence of Extreme Deviants." Human Relations, Vol. 5, 1952, 327-346.
- Harper, F. and Tuddenham, R. "The Sociometric Composition of the Group as a Determinant of Yielding to a Distorted Norm." J. of Psychology, Vol. 58, 1964, 307-311.
- Lambert, W. E. and Lowy, F. H. "Effects of the Presence and Discussion of Others on Expressed Attitudes." Canadian J. Psychology. Vol. 11, 1957, 151-156.
- Lott, A. J., and Lott, B. E. "Group Cohesiveness, Communication Level, and Conformity." J. Abnormal and Social Psychology, Vol. 62, 1961, 408-412.

- McGuigan, F. J., Experimental Psychology, Englewood Cliffs: Prentice-Hall, 1960.
- Moran, G. "Group Cohesion and Conformity Behavior." Psychological Reports. Vol. 17, 1965, 465-466.
- Pollis, N. P. "Relative Stability of Reference Scales Formed Under Individual, Togetherness, and Group Situations." Doctoral Dissertation, University of Oklahoma, Norman, 1964.
- Pollis, N. P. and Montgomery, R. L. "Conformity and Resistance to Compliance." J. of Psychology, Vol. 63, 1966, 35-41.
- Ramuz-Nienhuis, W. and Bergen, A. van. "Relations Between Some Components of Attraction-to-Group: A Replication." Human Relations, Vol. 13, 1960, 271-277.
- Rohrer, J. H., Baron, S. H., Hoffman, E. L., and Swander, D. V. "The Stability of Autokinetic Judgments." J. Abnormal and Social Psychology, Vol. 49, 1954, 595-597.
- Sampson, E. E., and Insko, C. A. "Cognitive Consistency and Performance in the Autokinetic Situation." J. Abnormal and Social Psychology, Vol. 68, 1964, 184-192.
- Schacter, S. "Deviation, Rejection, and Communication." J. Abnormal and Social Psychology. Vol. 46, 1951, 190-207.
- Schacter, S., Ellertson, N., McBride, D., and Gregory, D. "An Experimental Study of Cohesiveness and Productivity." Human Relations, Vol. 4, 1951, 229-238.
- Sherif, M. "A Study of Some Social Factors in Perception." Archives of Psychology, Vol. 27, 1935, No. 187.
- Thibaut, J. W., and Strickland, L. H. "Psychological Set and Social Conformity." J. Personality. Vol. 25, 1956, 115-129.
- Wilson, R. S. "Personality Patterns, Source Attractiveness, and Conformity." J. Personality. Vol. 28, 1960, 186-199.

APPENDIX

SOCIOGRAM

This is part of a study to find out to what extent college students socialize with each other. Findings may be used to help improve formal institutional rules so that college life can be more enjoyable. Everything will be held in the strictest confidence. Names are needed only for coding purposes. This questionnaire will in no way be used to evaluate you. Your help is needed and appreciated.

If there is not enough room in the space provided, use the back of the sheet. Remember to write down only college friends.

Name _____ Age _____ Sex _____

Check one: Freshman _____ Sophomore _____ Junior _____ Senior _____ Other _____

1. Whom do you like the most: List names in order of preference.

- | | |
|----------|-----------|
| 1. _____ | 8. _____ |
| 2. _____ | 9. _____ |
| 3. _____ | 10. _____ |
| 4. _____ | 11. _____ |
| 5. _____ | 12. _____ |
| 6. _____ | 13. _____ |
| 7. _____ | 14. _____ |

2. If you had to depend on a friend's judgment in a difficult situation, who would you trust first? List in order of preference.

- | | |
|----------|-----------|
| 1. _____ | 8. _____ |
| 2. _____ | 9. _____ |
| 3. _____ | 10. _____ |
| 4. _____ | 11. _____ |
| 5. _____ | 12. _____ |
| 6. _____ | 13. _____ |
| 7. _____ | 14. _____ |

3. If you were giving a party (money and location no problem) who would you like to invite? List in order of preference.

- | | | | |
|----|-------|-----|-------|
| 1. | _____ | 8. | _____ |
| 2. | _____ | 9. | _____ |
| 3. | _____ | 10. | _____ |
| 4. | _____ | 11. | _____ |
| 5. | _____ | 12. | _____ |
| 6. | _____ | 13. | _____ |
| 7. | _____ | 14. | _____ |

4. If campus civil defense units were created, and you were a part of it: (a) Of your friends, from whom would you be willing to take orders? List in order of acceptability.

- | | | | |
|----|-------|-----|-------|
| 1. | _____ | 8. | _____ |
| 2. | _____ | 9. | _____ |
| 3. | _____ | 10. | _____ |
| 4. | _____ | 11. | _____ |
| 5. | _____ | 12. | _____ |
| 6. | _____ | 13. | _____ |
| 7. | _____ | 14. | _____ |

- (b) Of your friends, with whom would you be willing to work with but only if you gave the orders? List in order of acceptability.

- | | | | |
|----|-------|-----|-------|
| 1. | _____ | 8. | _____ |
| 2. | _____ | 9. | _____ |
| 3. | _____ | 10. | _____ |
| 4. | _____ | 11. | _____ |
| 5. | _____ | 12. | _____ |
| 6. | _____ | 13. | _____ |
| 7. | _____ | 14. | _____ |

- (c) Of your friends with whom would you not be willing to work with? List in order of rejection.

- | | | | |
|----|-------|-----|-------|
| 1. | _____ | 8. | _____ |
| 2. | _____ | 9. | _____ |
| 3. | _____ | 10. | _____ |
| 4. | _____ | 11. | _____ |
| 5. | _____ | 12. | _____ |
| 6. | _____ | 13. | _____ |
| 7. | _____ | 14. | _____ |

5. Finally, list students who you consider to be friends, then draw a line, and list students who are acquaintances.

- | | | | |
|----|-------|-----|-------|
| 1. | _____ | 8. | _____ |
| 2. | _____ | 9. | _____ |
| 3. | _____ | 10. | _____ |
| 4. | _____ | 11. | _____ |
| 5. | _____ | 12. | _____ |
| 6. | _____ | 13. | _____ |
| 7. | _____ | 14. | _____ |

VITA

Robert Lew Montgomery

Candidate for the Degree of

Master of Science

Thesis: THE NECESSITY OF A DISTINCTION BETWEEN GROUP AND TOGETHERNESS
IN STUDIES ON CONFORMITY

Major Field: Psychology

Biographical:

Personal Data: Born in Grayson, Kentucky, July 2, 1941, the son
of Everett DeForest and Ruth Glass Montgomery.

Education: Received elementary and two years of secondary educa-
tion in the Grayson, Kentucky school system; graduated from
Bellaire High School, Bellaire, Ohio, June, 1959. Attended
Ohio University from 1959 until 1962; received Bachelor of
Arts degree with a major in Psychology from Bethany College,
Bethany, West Virginia in June, 1964. Completed requirements
for the Masters of Science degree with a major in Psychology
in May, 1967.

Professional Experience: Served as a research trainee in mental
retardation while also working as a research assistant in
social psychology at Oklahoma State University from September,
1964 through July, 1966; was a graduate teaching assistant at
Oklahoma State University, from June, 1966 to May, 1967.

Professional Organizations: Member of Psi Chi, National Honorary
Society in Psychology; student member of American Psycholo-
gical Association.