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THE RELATIVE INFLUENCES OF DOGMATISM
AND SITUATIONAL PRAISE
ON VARIABILITY IN SOCIAL PREFERENCE

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Jayne Sells Oldfield, B. Sc.

......

The Ohio State University
1963

Approved by

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Adviser
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Jayne Sells Oldfield
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A STATEMENT OF THE PROBLEM
AND RELEVANT RESEARCH

A. An overview of the present research

The present study is primarily concerned with variability in choice behavior. More specifically, the problem is whether or not choice variability is related to relatively enduring cognitive structures, as measured by the Rokeach (15) Dogmatism Scale, or more a function of cognitive changes brought about in subjects by specific social reinforcements of one person over another within a group situation. The study was conducted in two parts.

Part one

Comparisons were made between dogmatism scores, as measured by the second of two administrations of the Dogmatism Scale, and variability in choice, as measured by rank-preference inventories given at two-week intervals, over an eight-week period. Scores on the preference inventory were determined by evaluating the total variability existing on three criteria after subjects had been in discussion groups over a five-week period. Changes in rank preferences
were weighted with first-order preferences receiving the heaviest weight.

Identical preference scores, i.e., those pertaining to variability, were also compared with high and low groups on the dogmatism variable. High and low groups were determined by division at the mean of the dogmatism distribution.

**Part two**

Subjects excluded from the above data were used to test the influences of situational reinforcements on variability in social choice. Six experimental groups and six control groups were selected, and the two least-accepted members of each experimental group identified. These "recipient" or "target" subjects were given both verbal and non-verbal praise and approval within their respective group situations over a two-week period.

Comparisons were made between experimental and control groups as to the relative status of the two least-accepted members of each group before and after experimental treatment.

**B. Development of the problem**

The study of choice behavior has frequently been of research and theoretical interest. Initially
developed by Moreno (12) and his followers, choice behavior has become over the years an increasingly important psychological variable. Recently, Restle (14) and Luce (10) have attempted to formulate statistical models of choice based on utility theory.

The need for research on the problem of choice has been explicated by Tyler (17). Prentice (13) has called for the establishment of the lawful relationships among cognitive variables and patterns of choice in the hope that this will lead to a more adequate theory of motivation at prephysiological levels.

Thus, the process of choice variability, insofar as it leads to a greater understanding of why social choices are made and as to what may be the significant variables involved, is of equal importance.

Research on the topic of choice variability have been undertaken by Budden (2) who investigated choice consistency in pre-school subjects; and by Bonney (1) who compared teachers' judgments and self personality ratings with the constancy of social scores of young children; and by Horrocks and Thompson (7); Thompson and Horrocks (19) who investigated friendship fluctuations of urban and rural adolescents.
Two findings of the above research prompted the initial formulation of the present study. The first is the finding of the Thompson and Horrocks studies with adolescents; later confirmed and extended by the research of Horrocks and Buker (5) that a negative relationship exists between age and fluctuation in choice of friends. The second finding of this series of studies by the same authors, is that large individual differences exist within each age group on the fluctuation variable.

Thus, while age appears to be the salient variable in friendship fluctuation, this finding does not fully explain the large individual differences found within each age group. Further, the finding that fluctuation decreases with age, suggests that what is being measured may be phenotypic aspects of the process of social development. Should this be the case, then the large individual differences found within age groups may be relevant to cognitive differences among subjects, particularly as this may apply to those who are displaying less mature patterns of fluctuation, i.e., those who are more variable in their social choices than their age mates.
The degree of differentiation of cognitive structures has been linked with increasing age and life experiences of the individual by Lewin (9) who sees progressive differentiation of all areas of the life space as a function of increasing maturity. The viewpoint of the present study is that the degree of differentiation is relatively synonymous with developmental level. This receives some support from Lewin (9) who says:

In the long run, the various developmental levels will have to be defined conceptually in terms of degree of differentiation, organization, and similar properties other than age.

Another of Lewin's conceptualizations which may explain intra-age variability in choice is that of "regression". He defines the term operationally, i.e., as a change of behavior from a kind typical for older children to that typical for younger normal children. Thus, subjects who deviate from age norms on the fluctuation variable may be thought of as having "regressed" to a less mature level of social behavior.

The present research adopts individual differences in cognitive differentiation as the preferred explanatory variable. This is not purely a value
judgment, but has to do with the nature of the developmental process itself, which is regarded as an ongoing process. Thus, "regression", as a true reversal, is antithetical at best with this view of the developmental process. From Lewin's viewpoint, however, the term "regression" has many meanings, most of which are merely descriptive of behavioral events of a temporary nature.

The first purpose of the present study is to explore the relationship between individual differences in degree of cognitive differentiation and tendencies to vary in social choice. It is felt this relationship may be a possible explanatory factor relative to the large intra-age variability found previously in friendship fluctuation studies by Horrocks and Thompson.

A search of the literature was made for the most appropriate personality measurement which may reflect differences in cognitive factors. The dogmatism variable appeared to answer this search. Degree of differentiation of these structures is one of the prime determinants of "open" versus "closed" orientations to reality.

Generally, dogmatism is defined by Rokeach (15)
as being synonymous with closed cognitive organizations of beliefs and disbeliefs about reality. These cognitions are organized around a central set of beliefs about absolute authority, which, in turn, provides a framework for patterns of intolerance towards others according to the beliefs they accept or reject.

The work of Lewin, Gestalt theory generally, and the writings of Krech and Crutchfield (8) supply historical continuity for the dogmatism variable.

The common viewpoint shared is that cognitive structures vary in at least three different ways:

1. as to the degree of isolation of component parts, one from the other;
2. as to differentiation, or the degree of relative complexity of the structures;
3. as to tension between component systems or parts of systems

Rokeach bases his model on the foregoing premises. He speaks of a belief-disbelief system as the focal point of cognitive structure and content. The belief system is conceived to represent all beliefs, sets, expectancies, or hypotheses, conscious or unconscious, that a person at any given time accepts as true of the world in which he lives.

The disbelief system is composed of a series of sub-systems rather than just one. It contains all the
disbeliefs, sets, expectancies, conscious or uncon­
scious, that to one degree or another a person at any
given time rejects as false. The term "system" is
defined psychologically rather than logically, and the
interrelated parts bear a striking similarity to
Lewin's concept of the "life space".

The total belief-disbelief continua are meant to
represent each man's total framework for understanding
his universe as best he can.

The belief-disbelief system is organized into
three areas. The central part of the system is rela­
tive to the individual's primitive beliefs. Onto­
genetically speaking, this is the earliest formulated
and it contains beliefs about self, others, and the
nature of the physical world. Effects of group vi­
lations of these primitive beliefs as well as their
cognitive/emotional effects are here; for example,
beliefs as to the basic friendliness or unfriendli­
ness of the world, beliefs about parents and author­
ity figures, loving or punishing, and about people
in general, if they are to be trusted or feared.
Also, here are beliefs concerning the future,
security or apprehensiveness in this regard, and,
lastly, beliefs about the self and the generalized
"other".
Intermediate beliefs are seen as emerging from this central and primitive region. Beliefs remain primitive, parenthetically, if there are no external referents or authorities who can disconfirm them. One is reminded here of the role of the therapist, that of the authority who does disconfirm primitive beliefs.

The intermediate belief region is seen as the area in which beliefs about authority are paramount. Here are beliefs regarding how authority is to be used, and differences in the way authority is perceived. In the dogmatic, authority is regarded as absolute, and is perceived as a source of rewards and punishments. Little or no differentiation is made between information derived from the authority and the authority itself. If the dogmatic disagrees with the information, or rejects it, he tends to reject likewise the source of the information as well. One may be "faithful", "loyal", or "unfaithful" or "disloyal" to the degree one's beliefs are similar to those of the dogmatic. Within this framework, there exists no dichotomy between "in-groups" and "outgroups", but a continuum of "in-groups" and "outgroups" depending for their definition on similarity-dissimilarity of beliefs and
disbeliefs. The peripheral region is relative to beliefs and disbeliefs concerning surface expressions of more basic beliefs. For example; beliefs concerning the New Deal or birth control reflect more basic beliefs about Franklin D. Roosevelt or the Catholic church. Beliefs of this kind comprise the "content" of the peripheral region. The "structural" components of this region have more importance in that they serve a coding and screening function in relation to information coming in from the environment.

Initial screening may lead to the rejection of, or narrowing out of, such information entirely. If the information is compatible with primitive beliefs, and not so with intermediate beliefs, then selective avoidance occurs by way of altering or rationalizing the material so assimilation can take place. The final step is to file this information into whatever world view one has come to call one's own, the locus of which is the peripheral region.

Belief-disbelief systems are seen as ranging along a continuum from relatively "open" to relatively "closed". In the "closed" system, as has been indicated, information must often be tampered with; it must be narrowed or altered, or contained within isolated bounds.
The open system is such that new information is assimilated as is, and the difficult process of reconciliation with intermediate and peripheral beliefs changes the whole of the belief-disbelief system. While Rokeach does not explore this possibility in his discussions about belief systems, one might hypothesize that central region beliefs regarding approach or avoidance of the "new" and the "different" may be a decisive factor in open and closed orientations at the outset.

To summarize, Rokeach bases his model on the hypothesized structural configurations of cognitive organizations. The belief-disbelief system model has three areas; the central or primitive beliefs, the intermediate region, or beliefs regarding the nature of authority, and the peripheral, where Weltanschauung is paramount. Differences between open and closed orientations are primarily seen in the processing and coding of information arising from external sources. The dogmatic tends to alter or narrow out information which is incongruent with present beliefs-disbeliefs; the non-dogmatic tends to accept the information as it is. These two orientations differ also in their beliefs about the function and nature of authority. The closed system
regards authority as absolute and as serving a punitive or rewarding function. The open system is less threatened, and receives information emanating from authority for what it is, without regard to how it is believed the authority wishes action or reaction to information.

In a factorial study by Rokeach and Fruchter (16) dogmatism was found to be factorially discriminable from authoritarianism, ethnocentricism, and rigidity. Dogmatism is factorially similar to paranoia and self-rejection, and the three variables emerge together with anxiety on a single factor.

Thus, because the Dogmatism Scale appears to be measuring a syndrome of variables pertinent to cognitive states which are relatively enduring over time, it would seem a fruitful one to compare with variability in choice, especially as this choice applies to peers.

Because of the dominance of central or primitive beliefs over the entire belief system, one may be witnessing the effects of certain early and continuing experiences developed within the family matrix, and certain tendencies to avoid rather than to approach.

One might conjecture that such tendencies over a long span of time would systematically build up cognitive systems which are less differentiated,
prone to isolated components, with imbalance within the system which creates tension throughout.

In a somewhat less idiographic vein, observations of the behavior of children, especially in regard to their peer judgments and attitudes toward authority, might lead one to note certain similarities between the behavior of the child and the adult dogmatic. As research has indicated, young children tend to fluctuate more in their friendship choices, and, by observation, tend to accept or reject their peers in an "all" or "none" fashion on the basis of what appears to be relatively ephemeral criteria. Certain attitudes children often have towards authority as being either punitive or rewarding also tend to support this notion.

Thus, nomothetically, most individuals could be seen as progressing developmentally from a relatively closed to a more open and more highly differentiated system of belief-disbelief, while others are systematically "retarded" in their social attitudes because of early experiences relating to the process of social development, as well as to later experiences with the peer group during the elementary years of schooling. The research upon which the present study is based tends to give credence to this position.
It suggests that tendency to vary in social preference may be an important manifestation of the social development process. The large intra-age variability found within age groups also suggests some systematic variance within this process. This variance may be learned attitudes of avoidance of persons, social situations and the problems which arise from these sources; a behavior which should over time result in a lack of sufficient cognitive differentiation in these areas. Conversely, approach behavior should result in increasing differentiation. Very simply, this may be seen as "not understanding" versus "understanding" people and events associated with them.

A preliminary test of the foregoing was made with subjects of college age. It was reasoned, if differences could be found at this age level between dogmatism and tendencies to be more variable in peer choices, some support would be forthcoming for regarding dogmatism as a developmental variable, and further research indicated.

A second purpose of the present study, was to explore the relationship of situational influences upon fluctuation in choice. This facet of the research, ignores personality factors, and takes the
position that personal characteristics of individuals as they pertain to cognitive differentiation, or any other characteristic, are less influential to fluctuation in choice than are the perceptions of others about these individuals as they are shaped by external events within a specific setting.

In order to test this assumption, stimulus events were introduced, by the instructor, to small groups within two college classrooms using a group-learning technique. These events were praise and cues signifying approval directed toward the two least-accepted members of each experimental group over a two-week period. This constituted what shall be referred to as "experimental treatment".

Generally, treatment variables were seen as components of the field of experimental subjects. What has occurred in a group prior to the introduction of treatment variables, may be thought of as a preliminary structuring of group preferences in terms of the cognitions of group members in regard to other group members. Thus, as positive and negative valences are functions of cognitions (Lewin, 1951) the two least chosen members have become a source of negative valence within the group. The experimental treatment was designed to change group cognitions,
and thus reduce both the direction and magnitude of some of the negative vectors operating in the group.
CHAPTER II

METHODODOLOGY

A. The sample

Research samples were selected from approximately 175 college students, male and female, who were enrolled in educational psychology classes, at The Ohio State University, in the fall of 1962. The majority were sophomores. The modal age was nineteen years. The ratio of females to males was approximately two to one. All subjects had had at least one prior course in elementary psychology.

B. The research setting

During a period of approximately three months subjects met daily, in small six to seven-person discussion groups, for the purposes of defining, relating, assimilating and applying the facts and principles of educational psychology. The structure of the classes differs from typical college classes in that the instructors do not lecture, but serve as resource persons.

In this setting, student-instructor relationships, while still formal, tend to be somewhat more intimate than in a lecture setting. The instructor is given an opportunity to become better acquainted with his students, and instruction is often on a
one-to-one basis. Typically, during a class hour, the instructor visits all discussion groups, and may, when the occasion arises, clarify or enrich both discussion of text material as well as suggest possible applications of the material to the elementary or secondary classroom situations.

C. Research methods

In this sample, as previously mentioned, the ratio of female students to male students is approximately two to one. At the beginning of the semester, subjects were asked to distribute themselves according to this ratio per group. Subjects were questioned as to prior acquaintanceship by asking which persons each other and would like to sit together. These persons were separated. These two conditions were the only experimental restrictions made on group arrangement. Classes were conducted as usual as to materials used and teaching procedures.

After the first week of class, subjects were told they had been chosen to participate in a special research project, and were read a prepared statement which emphasized the value of research in furthering knowledge of human behavior. Inasmuch as students had at least one course in psychology

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1 See summary of methodology, page 31
2 See Appendix I
prior to that in which this research was undertaken, and had served as research subjects as an adjunct of that course, they were relatively sophisticated as to why research is carried on and as to the definition of their role as subjects.

The prepared statement also emphasized that subjects were not to discuss their responses to the research material in or outside of the classroom. It was explained, without revealing the purposes of the research, how this may influence results, making their prior efforts as subjects, as well as the research itself, invalid. This point was re-emphasized throughout as research data was being collected.

One male and one female instructor participated in gathering the data for Part one of this study, the latter was also the researcher and present writer. Because of possible contamination of data arising from this dual role as instructor and researcher, the research was represented to the subjects as being carried on by two "researchers" who were connected with the "department".

Special precautions were taken to carry through the impression that the instructor was only an agent of the "researchers". If a subject were absent on a day research data were collected, he was required to
make it up immediately. In this manner, preference inventories, given at two-week intervals, were kept current as to the relative rank of all group members within one particular span of time. In communicating with subjects about such matters, reference was always made to "the researchers", and first person pronouns were avoided. Generally, cooperation of the subjects was good to excellent.

Data from a control group, consisting of subjects not currently enrolled in discussion or group-learning classes, were gathered for the purpose of comparing the possible effects of the group experience upon dogmatic attitudes. These control subjects were currently enrolled in an elementary psychology course taught by the lecture method. The modal age of this group was eighteen years, as contrasted with a modal age of nineteen years for the experimental group. The control sample was heavily weighted with female subjects.

Two instruments were used in the present research, the Dogmatism Scale, Form E, developed by Milton Rokeach and co-workers at Michigan State University; and a preference inventory, devised by the experimenter, which required subjects to rank their preferences of group members on the basis of
three different criteria, namely; Academic, Social, and Friendship. The first of these was academically orientated, and asked subjects to rank all group members in terms of a preferred co-worker on a project highly influential to their grades in the course. The second criterion required subjects to rank all group members in terms of their preferences as to companions at a purely social function, and the third, asked subjects to rank all members in terms of which they liked the best and would prefer having as "best" friends.

Data pertinent to Part one of this study were collected by the administration of the Dogmatism Scale at the beginning and close of a nine-week period. The preference inventory was administered four times; the first administration occurring after groups had been together for ten days. Administrations were made at two-week intervals. Pre and post administrations of the Dogmatism Scale were used for the purposes of testing three possible sources of influence upon dogmatic attitudes: (1) the possible influence of the group discussion situation in the reduction of dogmatic attitudes, (2) sex differences of subjects and the possible differential effects of this variable.

^3^See Appendix I
upon dogmatic attitudes in the group situation (3), differences arising from instructor variables such as personality and/or sex differences which may systematically alter responses to the Dogmatism Scale.

Post scores of the Dogmatism Scale were used for assessing the degree of relationship existing between dogmatism and fluctuation in social choice. Choice fluctuation scores were determined by the total variability existing in rank preferences, over all criteria, on third and fourth administrations of the preference inventory.

Two analyses were made using the foregoing dogmatism and choice fluctuation scores. These were: (1) an analysis of the relationship existing between dogmatism and choice fluctuation, (2) an analysis of the relationship between groups high and low on the dogmatism variable and choice fluctuation.

A portion of the total sample was excluded from the above analyses because of contaminating factors arising from treatment variables given to experimental groups for the purpose of testing situational influences on fluctuation in social choice. This sample constitutes the subjects of Part two of the present study.
Discussion groups in the present writer's two classes were used as the subjects for the second part of this research. The groups were randomly divided into experimentals and controls, yielding a total of six experimental and six control groups, three of each in each classroom.

Data from the first and second administrations of the preference inventory were used to identify the two least-preferred members of each experimental group. This was done by tallying the number of times all group members were ranked last, or second from last, on each preference inventory criterion. Those appearing most frequently were designated as "recipient" subjects for experimental treatment. As inferred above, like members of control groups were not identified until the termination of experimental treatment in order to control for possible experimenter bias.

After identification of recipient subjects had been made, "case study" discussion material was given to all students. These materials, previously developed by Horrocks and Horrocks (6) for use in group discussion and lecture classrooms, differ from regular course material in that they require direct application of factual content to specific but
hypothetical situations and persons. Information about the troubled young person is sectioned into three parts, and students are required to read each part sequentially, and to respond to accompanying questions of a diagnostic and remedial nature. Correct responses are determined by agreement with expert judges. These studies, printed in booklet form, are an integral part of the course, and three case studies are used throughout the semester.

It has been observed that some persons are more successful in answering case study materials than are others. Excellence in knowledge of psychological facts, as tested by examinations over text material, does not always predict equal success in application of these facts and principles.

Thus, case study material offers a unique opportunity for some students to succeed where relative failure may have been the mode. They also provide a situation in which praise can be given to selected members of each group for performance which will be perceived as plausible and deserved by other members of the group despite any observed inadequacy of recipient group members in past performance. This is particularly relevant to research subjects used in the present study as they were told, in advance of
the presentation of the case study material, of the frequent lack of correlation between knowledge of the text and applications thereof.

Subjects were also told that portions of their group discussions of case study material would be recorded on tape. The tape recorder was introduced into the classroom a day or two before the experimental period in order to minimize any uncontrolled factors which might arise as a function of this equipment. The rationale given to subjects was that the instructor was interested in hearing portions of group discussions in order to test the merit of taping group discussions for evaluative purposes.

Portions of all group discussions were taped, and this technique continued throughout the experimental period. Some efforts were made to control length of time spent taping the discussions, but a rigid time schedule was not practical nor in the best interests of the present research. Such a schedule would have necessitated removing the recorder while one or another of the subjects was speaking. This was avoided because of implications that might be aroused that what was being said was not important.

It was a major goal of this particular problem not to reinforce, positively or negatively, any
subject except those specifically designated for experimental treatment. The experimenter attempted to maintain an open and pleasantly neutral attitude as a response to the behavior of all other subjects.

Experimental treatment variables consisted of praise and non-verbal cues signifying approval given to recipient subjects over a period of two weeks. Whenever possible, a "model" unit or sequential pattern of verbal and non-verbal reinforcements was used.

This unit was derived from observation of teacher-student relationships within classroom situations. The inception of this unit is typically a remark, comment, or idea offered by the student. Response from the instructor is an observable increase in interest and attentiveness, signified mainly by body movements toward the subject. If plausible, a request for repetition or restatement of the subject's communication is made. Often this was plausible in this situation because of the relatively high noise level typical of group discussion classes.

Restatement of the comment is accompanied by an affirmative nodding of the head as the subject is speaking, followed as quickly as possible by a
favorable comment on the contribution, or an embellishment of the original statement. The conclusion of this unit is made by the instructor, who in the most appropriate manner relative to the situation, gives full credit to the subject who initiated the comment for any interim gains made in understanding, knowledge from all sources, i.e., the instructor and other members of the group.

Specific analysis of the components of the above model must await further research. In its present form, it might be called the "teacher's pet" effect, although this is somewhat overstating what actually occurs.

The above model is, of course, an "ideal" case, and it follows that variance upon this basic unit is more typical. Often distortions are created by extraneous factors, and thus, the unit was used with some latitude.

Conformance to the immediate situation rather than to the "model" was paramount. While the latter appears the more desirable from the viewpoint of "technique-centered" (Maslow, 1954) research methodology, the intrusion of artifice into the research setting seemed the more serious error.
Following the collection of all research materials group status scores were computed for recipient subjects and the two-least accepted members of each control group. These scores differ from fluctuation scores in two ways. First, all rank positions were included instead of only first, second, and third rank positions, within each criterion of the preference inventory.

Secondly, group status scores were not weighted. Following a pre and post design, the rank positions of each recipient and like control subject were summed over the first and second administrations of the preference inventory, and a mean of ranks taken. This yielded a pre-treatment mean rank score for each recipient and control. An identical procedure was initiated for ranks over the third and fourth administrations of the preference inventory, yielding post-treatment mean rank scores. 4

Group status scores represent the relative degree of group acceptance before and after experimental treatment. A total of ten recipients and ten control subjects comprised the final sample.

D. Research instruments

The Dogmatism Scale was developed by Rokeach and his co-workers at Michigan State University.

4 See Appendix II
Five successive revisions were made; the last, Form E, is the Scale used in the present study.

Form E, represents the best, by item analysis, of the original sixty-six item scale. All items in this Form differentiate significantly between high and low dogmatics. Reliabilities are quoted (Rokeach, 1960) as ranging from .68 to .85. Samples used were 249 college students, 158 of whom were Ohio State University students. Reliability coefficients on the latter were obtained by test-retest with a period of five or six months intervening between tests.

Reliabilities in other samples, i.e., English college students, English workers, and subjects from a Veteran's Administration domiciliary, range from .78 to .93. For the latter samples, one month intervened between test-retest.

The preference inventory was devised by the present writer. It is a variation of the sociometric technique in that it requires the subjects to evaluate all group members. Further, it does not meet all the requirements set by Moreno for a sociometric measure. As mentioned, the subjects were not permitted to choose as many or as few of the group members as they wished, but were required to rank all persons
in the group. The preference inventory does not meet a second prescription of a pure sociometric measure, i.e., subjects choices must be used to restructure the group. This is seen by Moreno (12) as a means of motivating subjects to be candid in their choice-making. This may be of importance when subjects, through lack of understanding, or of instructions, form their own opinions as to why data are being collected.

However, in the present study, all measurements were represented from the beginning as being collected for the purposes of research only. Motivational aspects of the subjects, therefore, depended upon their understandings of the importance of research, and upon their willingness to contribute to furthering the understanding of human behavior.

The educational level and relative maturity of the subjects made this altruistic approach to the problem of motivation possible.

The reliability of this instrument was obtained by measuring the internal consistency of subjects' responses. Choices appearing in the two lowest rank positions in each criterion of the first and second

\[ r = .95 \]
preference inventories were compared with those of the third and fourth preference inventories.

Moreno (12) and Criswell (3) have reported that as choice position deviates from first-order preferences, variability tends to become greater. Thus, as the two most deviant choice positions were used in estimating the reliability of the preference inventory, a conservative test of the internal consistency of this instrument resulted.

TABLE I
OUTLINE OF RESEARCH METHODOLOGY

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<tr>
<td>Preference Inventory III</td>
<td>11/2/62</td>
</tr>
<tr>
<td>Preference Inventory IV</td>
<td>11/19/62</td>
</tr>
<tr>
<td>Dogmatism Scale II</td>
<td>11/20/62</td>
</tr>
</tbody>
</table>

*Classes began September 24, 1962
CHAPTER III

STATISTICAL ANALYSIS

A. Part one

Data pertaining to pre and post administrations of the Dogmatism Scale were analyzed for the purpose of determining possible influences of the group learning situation upon responses to the post measure of the Dogmatism Scale.

Inasmuch as the total experimental group was to be composed of subjects experiencing the group learning situation under two different instructors, and because sex differences may occur within each group as a function of instructor bias; first and second analyses of the data were made for the purpose of testing for these possible differences. Table II, illustrates division of the experimental group into male and female components, holding instructor bias constant.

<p>| Table II |
|-----------------|--------|--------|--------|------|
| MEAN DIFFERENCE OF EXPERIMENTAL GROUPS I, II, ON PRE-POST DOGMATISM MEASUREMENTS |</p>
<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Md</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (pre-post)</td>
<td>29</td>
<td>+5.51</td>
<td>15.79</td>
<td>1.85*</td>
</tr>
<tr>
<td>Female (pre-post)</td>
<td>28</td>
<td>- .214</td>
<td>17.84</td>
<td>.062*</td>
</tr>
<tr>
<td>Experimental II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (pre-post)</td>
<td>23</td>
<td>+4.00</td>
<td>18.77</td>
<td>1.00*</td>
</tr>
<tr>
<td>Female (pre-post)</td>
<td>23</td>
<td>-2.08</td>
<td>19.02</td>
<td>.514*</td>
</tr>
</tbody>
</table>

*Not Significant
Fisher's t test for correlated means (4) was used to ascertain if differences existed between pre and post dogmatism scores within sex groups.

Experimental Group I was composed of subjects meeting at the eight, two, and three o'clock hours of a group discussion class held under the guidance of a male instructor. Ages of male subjects within this group ranged from nineteen to twenty-five years, with a modal age of nineteen. Ages of female subjects within this group ranged from eighteen to twenty-three years, with a modal age of nineteen.

Experimental Group II was composed of subjects meeting at the twelve and one o'clock hours of a group discussion class held under the guidance of a female instructor. Ages of male subjects within this group range from eighteen to forty-six, with a modal age of twenty years. Ages of female subjects within this group range from eighteen to twenty-eight years, with a modal age of nineteen years.

As indicated in Table II, differences between male and female groups with instructor bias held constant, were found to be non-significant.

Inasmuch as no significant sex differences were found within instructor groups, male and female subjects of each group were combined for the purpose of
testing for instructor bias. Statistical analysis of the data were obtained by use of Fisher's t test for uncorrelated means (4). Table III illustrates the results of this analysis.

### TABLE III

**MEAN DIFFERENCE OF COMBINED EXPERIMENTAL GROUPS INSTRUCTOR I, INSTRUCTOR II**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Md</th>
<th>S.D.</th>
<th>t</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental I, II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor I</td>
<td>57</td>
<td>+2.701</td>
<td>16.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor II</td>
<td>46</td>
<td>+0.456</td>
<td>18.89</td>
<td>0.633*</td>
<td>1.20*</td>
</tr>
</tbody>
</table>

*Not significant

As illustrated in Table III, no significant difference was found between instructor groups.

Inasmuch as instructor bias was not a significant factor, all males and all females over instructor groups were combined for the purpose of testing for possible differential experiences related to sex within the discussion group setting. It was previously stated that males were outnumbered within these groups two to one. In this sense, males constituted a minority group within this setting. Fisher's t test for uncorrelated means (4) was used for the statistical analysis. Table IV illustrates the results of this analysis.
TABLE IV
MEAN DIFFERENCE OF COMBINED MALES AND COMBINED FEMALES EXPERIMENTAL GROUPS I, II

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Md</th>
<th>S.D.</th>
<th>t</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental I, II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (pre-post)</td>
<td>52</td>
<td>+4.40</td>
<td>17.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (pre-post)</td>
<td>51</td>
<td>-1.06</td>
<td>18.38</td>
<td>1.55*</td>
<td>1.14*</td>
</tr>
</tbody>
</table>

*Not Significant

The age range for male subjects in the above Table, is eighteen to forty-six years, with a modal age of twenty years. For female subjects, age ranges from eighteen to twenty-eight years, with a modal age of nineteen years.

As indicated in Table IV, experiences tend to differ for sex groups in group discussion classes. Males tend to increase in dogmatic attitudes, as indicated by the positive direction of mean differences, and females tend to decrease in dogmatic attitudes, as indicated by the negative direction of mean differences. The difference between sex groups, however, is not statistically significant.

The next analysis of data was made by combining all male subjects and all female subjects of a control group.
This group was composed of subjects enrolled in general psychology classes taught by the lecture method. Because of prior experimental commitments of male subjects from this population, as well as their relatively fewer number, the control sample was heavily biased in favor of female subjects. Because of this somewhat large discrepancy in N's, a t value was obtained using an unpooled standard error of the difference between means.\textsuperscript{1} The results of this analysis are illustrated in Table V.

**TABLE V**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Md</th>
<th>S.D.</th>
<th>dm</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (pre-post)</td>
<td>4</td>
<td>+1.25</td>
<td>3.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (pre-post)</td>
<td>31</td>
<td>+1.77</td>
<td>11.88</td>
<td>2.96</td>
<td>.175*</td>
</tr>
</tbody>
</table>

*Not significant

The next series of analyses are pertinent to the exploration of possible relationships between dogmatism and choice variability.

\textsuperscript{1}This statistic is said to compensate for large N differences (4). In the opinion of the writer, however, it is probably not possible to compensate for the inherent lack of reliability of so small a representation of male subjects.
Dogmatism scores on the post administration of the Dogmatism Scale were compared with choice variability scores derived from the third and fourth administrations of the preference inventory. Variability scores were computed by tabulating changes in first, second, and third rank preferences of each individual. Changes as to preferences were weighted. A change in first position, i.e., the most preferred person in any one criteria ranking, was given a weight of three. Changes in second most preferred person were given a weight of two, and in third position, a weight of one. Scores were then summed over all three criteria, yielding the choice variability score.

The sample used is identical to Experimental Group I. Experimental Group II, was not used because of an intervening experimental treatment on this group which served as a contaminating factor on choice variability.

Pearson's product-moment coefficient of correlation was used for the statistical analysis of these data. Results of this analysis are illustrated in Table VI.
TABLE VI
THE RELATIONSHIP OF DOGMATISM AND FLUCTUATION

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>r</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental I</td>
<td>56</td>
<td>135.48</td>
<td>24.36</td>
<td>.11</td>
<td>.8118*</td>
</tr>
</tbody>
</table>

*Not significant

As indicated in Table VI, the relationship between dogmatism and choice fluctuation is not significantly different from zero.

Further analysis of these data was made by dividing the total distribution at the mean, thereby creating high and low groups. Two Pearson product-moment coefficients of correlation were computed. Table VII, illustrates the results of this analysis.

TABLE VII
THE RELATIONSHIP OF HIGH AND LOW DOGMATICS TO CHOICE VARIABILITY

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>High dogmatics</td>
<td>32</td>
<td>151.12</td>
<td>11.35</td>
<td>.15</td>
</tr>
<tr>
<td>Low dogmatics</td>
<td>24</td>
<td>144.62</td>
<td>21.27</td>
<td>.19</td>
</tr>
</tbody>
</table>

*Not significant

As indicated in Table VII, correlations between high and low groups on the dogmatism variable and fluctuation in social choice are not significantly different from zero.
B. **Part two**

The final sequence of statistical analyses were made on data collected from subjects of Experimental Group II. As previously described, this sample consisted of subjects within the writer's twelve and one o'clock group discussion classes. Discussion groups within these two classes were divided into twelve groups, three experimental and three control groups in each class.

A treatment designed to test the effects of situational praise and approval on choice variability was given to experimental groups. Earlier in the present paper, this treatment has been referred to as the "teacher's pet" effect, and a model or "ideal" case described.

The selection of recipient subjects for praise and approval was made by determining, by frequency of appearance in the two lowest ranks, which two group members were least preferred on all criteria by other group members over the first and second preference inventories.

Group status scores were computed by the use of numbers synonomous with rank position as they occurred in all three criteria. These scores were then summed
over each of the two pre-treatment and each of the post-treatment preference inventories. A mean was taken, yielding a mean rank score for each experimental and control subject. These pre-treatment and post-treatment scores were used in the analysis of the datum.

Because of the variance in numbers of ranks within both experimental and control groups, a scoring system was devised which would equate all groups. This system involved the scoring of seven-person groups only, and consisted of the assignment of two third position ranks to persons ranked third and fourth within each criterion. This scoring method systematically reduced total variance within larger groups. A conservative statistical test resulted as the experimental group had four such groups, and control groups only one seven-person group.

The total sample used in analysis consisted of five experimental and five control groups. One group and its control were eliminated because of the loss of one recipient experimental subject. Three negro subjects were also eliminated from the control group to control for possible ethnic bias. This loss created an imbalance in the control group, i.e., two
groups of five members each. These groups were replaced by two six-person groups from Experimental Group I. A two factor analysis of variance with repeated measures (20) was used for statistical analysis of the datum. Table VIII illustrates the results.

**TABLE VIII**

ANALYSIS OF VARIANCE
EXPERIMENTAL AND CONTROL

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>ss</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A groups</td>
<td>7.99</td>
<td>1</td>
<td>.79</td>
<td>2.194*</td>
</tr>
<tr>
<td>Subjects w/grps.</td>
<td>6.55</td>
<td>1</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td><strong>Within subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B (pre-post)</td>
<td>.93</td>
<td>1</td>
<td>.93</td>
<td>11.626***</td>
</tr>
<tr>
<td>AB</td>
<td>.63</td>
<td>1</td>
<td>.63</td>
<td>7.875**</td>
</tr>
<tr>
<td>B x subjs. w/grps.</td>
<td>1.43</td>
<td>18</td>
<td>.08</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant
**Significant beyond the .05 level
***Significant beyond the .005 level

Results indicate that both the interaction term and pre and post treatment effects are statistically significant.

A further analysis of the research material was made for purposes of comparing means between all groups in order to determine the directions of the
significant interaction term. Results of this analysis, obtained by using the Newman-Keuls procedure (20), are given in Table IX.

**TABLE IX**

COMPARISON OF ALL POSSIBLE INTERACTION MEANS OF RANKS

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre M</th>
<th>Post M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>3.85</td>
<td>3.80</td>
</tr>
<tr>
<td>Experimental</td>
<td>3.83</td>
<td>3.27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Means</th>
<th>Md</th>
<th>$\sigma$-AB</th>
<th>df</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>(C-pre)-(E-post)</td>
<td>.58</td>
<td>.090</td>
<td>4,18</td>
<td>6.44***</td>
</tr>
<tr>
<td>(C-pre)-(E-pre)</td>
<td>.02</td>
<td>&quot;</td>
<td>3,18</td>
<td>.22*</td>
</tr>
<tr>
<td>(C-pre)-(C-post)</td>
<td>.05</td>
<td>&quot;</td>
<td>2,18</td>
<td>.55*</td>
</tr>
<tr>
<td>(E-pre)-(E-post)</td>
<td>.56</td>
<td>&quot;</td>
<td>3,18</td>
<td>6.22***</td>
</tr>
<tr>
<td>(E-pre)-(C-post)</td>
<td>.03</td>
<td>&quot;</td>
<td>2,18</td>
<td>.33*</td>
</tr>
<tr>
<td>(C-post)-(E-post)</td>
<td>.53</td>
<td>&quot;</td>
<td>2,18</td>
<td>5.88***</td>
</tr>
</tbody>
</table>

*Not significant
**Significant beyond the .01 level

B. J. Winer (20) lists the following significance levels, where $r = df$:

$$q = .01 \ (r, 18) \quad r = 2 \quad r = 3 \quad r = 4$$

$$\frac{5.09}{4.70} \quad \frac{4.07}{4.07}$$

Thus, while Table IX illustrates significant differences between pre and post experimental, pre-control and post-experimental, and post-control and post-experimental means, exact significance levels cannot be determined because of the lack of available
reference tables for $q$ which exceed the .01 level of significance.

It is evident, by inspection, however, that both pre and post experimental and pre-control and post-experimental means go substantially beyond this level of significance.
CHAPTER IV

DISCUSSION

The present study was designed to answer three basic questions which arose from the research findings of a series of earlier studies on friendship fluctuation.

Horrocks and Thompson (7); Thompson and Horrocks (19) investigated variability in friendship preferences of urban and rural adolescents. Their findings indicated that variability in preference of friends was negatively related to age. An auxiliary finding was that a large degree of variability existed within each age group.

Thus, the first question asked was of an exploratory nature, i.e., are there cognitive differences related to individual developmental processes which might explain this relatively large intra-age variability?

The dogmatism variable was chosen as a possible explanatory variable because of its reported ability to measure structurally different cognitive components.

In direct response to the research setting, certain incidental questions were also investigated. Generally, these involved whether differential experiences existed for members of small discussion groups within psychology classes as a function of
instructor bias and/or sex. As these incidental aspects preceded the more basic questions insofar as the statistical analysis of this material is concerned; they will be the first discussed.

Analysis revealed that instructor bias was not a significant factor in determining differences in responses of subjects to a post administration of the Dogmatism Scale. It was anticipated that if such differences had existed, they would be a function of instructor differences in sex, age, and personality factors. Results, as illustrated in Table III, page thirty-four, show both instructor groups tend toward greater agreement with dogmatic statements at the end of a test-retest interval of approximately nine weeks. This result is contrary to that which might be reasonably expected. A major goal of group discussion classes is that of teaching cooperation with others in a common learning experience. Ideally, the process of deindividuation may occur in which group members feel "submerged" in the group, no longer separate entities, but components of the group itself. This process is seen as one involving need satisfaction for all group members, and should, under these circumstances and in varying degrees, substantially reduce paranoia, self-rejection, and anxiety. It
may also be expected that cooperation with others in a common task would tend to increase tolerance for others' beliefs and disbeliefs rather than the reverse. Perhaps this finding is less indicative of failure of group discussion classes to achieve their goals, and more indicative of a tendency for all subjects to respond to a second administration of the Dogmatism Scale with greater agreement with dogmatic items. Some evidence for this may be seen in Table V, page thirty-six. Control subjects, those who had not experienced the group discussion method of learning during the test-retest period, also tend toward greater agreement with dogmatic statements. Thus, "acquiescent set" becomes more or less a generalized response to the academic setting.

Some arguments against the above may arise, however, when a closer look is taken at the differential experiences of sex groups within the group learning situation. As illustrated in Table II, page thirty-two, and Table IV, page thirty-five, males and females tend to differ in the degree of agreement with dogmatic statements. On the one hand, males tend toward greater agreement over the test-retest interval, while on the other hand, females reverse directions, tending to agree less with
dogmatic items over the same period. A possible explanation for this reversal in agreement may be that of number. As mentioned, females outnumbered males in this sample two to one. The research design also stipulated that each group was to be composed of at least two male members. In the ordinary six-person discussion group, four members were female and two male. In a sense, one might think of male subjects in this sample as a "minority" group. Certainly, if the group were a democratic one, "male" opinions, goals, and interests must have been somewhat superceded by those of female group members, and coupled with this experience may have been others typical of the experiences of "out-group" membership.

While this possibility is a particularly intriguing one from the viewpoint of further research, it does not preclude the possibility of other explanatory factors.

The trend toward differential agreement patterns of sex groups is sufficiently great so it may not be said that no relationship exists. Although results fall short of statistical significance, a more definitive examination of these differences should be made by way of further research.

The first of the major purposes of this research
was to test the efficacy of the dogmatism variable in predicting differences in choice fluctuation. The sample used, subjects of college age, was a convenient one rather than one of primary interest. The rationale here was that if a substantial relationship existed at college levels between these two variables, some evidence relative to differential learning patterns during the social development process could be more reasonably assumed to be a function of the dogmatism variable. Should this have been the case, certain adaptations more suitable for younger subjects would have had to be made.

Results indicate, however, that correlations between dogmatism and choice fluctuation are of a consistent low order. A particularly important finding as to this relationship is the tendency for correlation coefficients to decline as numbers of cases are increased.

When groups are divided at the mean into "high" and "low" dogmatics, the relationships of these groups to fluctuation in choice is, again, not significantly different from zero. The dogmatism curve tends to be leptokurtic, with relatively few cases falling outside the areas of plus or minus one standard deviation.
from the mean. This factor, as well as methodological ones, prohibited comparisons of extreme groups with fluctuation in social choice.

In view of the above results, it must be assumed that cognitive factors, as measured by the Dogmatism Scale, are not sufficiently related to tendencies to vary in social preferences to warrant further research in this area with this instrument.

The second major purpose of this research was concerned with the effects of stimulus situations, or situational influences upon fluctuation in social preference.

Theoretically, this section of the present study is based upon Lewin's conceptualization of "field forces". The experimental manipulation of these forces as they exist within small groups, was directed toward reducing negative valences developed over time toward particular group members. Previous chapters have described how subjects were selected for this treatment, and a description given of the experimental treatment as embodied in an "ideal" case.

Analysis of the effectiveness of treatment variables indicate that they are highly instrumental
in bringing about changes in social preferences within groups. Pre and post analysis of the scores of recipient subjects indicate a substantial increase in acceptance of these subjects within their respective groups. Statistically, variance within experimental groups, is significant beyond the .005 level, as indicated in Table VIII, page forty-one.

In a further analysis of all sources contributing to the variance, significant mean differences were found between the following beyond the .01 level:

1. between pre-treatment and post-treatment experimental groups
2. between pre-treatment control and post-treatment experimental groups
3. between post-treatment control and post-treatment experimental groups

All other mean differences were found to be statistically non-significant. Illustration of all mean differences may be found in Table IX, page forty-two.

Interpretation of these results can be approached from alternative viewpoints. Insofar as they envelop group perceptions of recipient subjects and changes therein, they are the concern of social psychology, and explanations can be made within a Lewinian framework as to changes in the valence
properties of "field forces". However, the results are confounded somewhat by a lack of a definitive understanding of the interaction between experimental manipulations of valence properties of the field and that of the possible changes that may have occurred intra-subjects by way of changes in self-concept.

A behavioral viewpoint might interpret treatment variables as reinforcement of recipient subjects' communications. It would follow, therefore, that increases in communication within this setting may be interpreted by fellow group members as an increased interest in group goals and as increased effort, on the part of recipient subjects toward reaching these goals. Greater group acceptance logically follows.

The two latter interpretations appear the most feasible for further development of this effect, and offer the most reliable means of measuring what actually occurs within the group. Measurements of possible changes in self-concepts and increased verbalization should yield a more definitive explanation of this phenomenon.

As to the relative influences of dogmatism and situational praise upon variability in social preference, the third of the basic questions asked
and the subject of the present research, it would appear that the latter has the more salient influence upon choice behavior.
SUMMARY AND CONCLUSIONS

The major interest of the present research has centered around the determinants involved in behavioral tendencies to vary in social preference. Two directional aspects as to the determinants of this variable have been explored.

The first, designated as Part one of the present study, investigates the relationship of a relatively enduring cognitive/emotional variable, i.e., dogmatism, ¹ to the tendency to vary in social choice.

Part two of the present study, has been concerned with relatively transitory situational influences upon cognition and thus, upon fluctuations in social choice.

Research subjects were college students enrolled in five educational psychology classes using a group discussion technique as the basic teaching method. Each class was composed of six discussion groups, with six to seven students in each group. Instructor-student relationships in these classes are less formal than those in typical college classrooms using the lecture method. Teaching is often on a one-to-one basis.

¹As defined by Rokeach (15)
A. Part one

The Rokeach Dogmatism Scale, Form E, was administered to 175 students a few days after classes convened in the autumn quarter of the school term, 1962. It was readministered two weeks before the termination of the classes. A period of nine weeks intervened between test-retest.

A preference inventory was administered five days after discussion groups were formed, and three times thereafter, at regular two-week intervals.

The preference inventory required group members to rank all others in their respective groups as to three criteria, namely; Academic, Social and Friendship.

Fluctuations in social preference were measured by comparing each inventory to the one preceding. Changes in first, second, and third positions were tabulated over each criterion. A weight of three was given to a change in first-order rank; a weight of two for a change in second-order rank; and a weight of one for changes in third-order rank.

To obtain a more reliable index of fluctuation in social choice, only scores summed over the third and fourth administrations of the preference inventory
were used in the statistical analysis. The reason for this was a logical one. It is to be expected that most subjects during the initial period of acquaintanceship would tend to fluctuate somewhat in their preferences for other group members. As knowledge of others increases, however, preferences should become asymptotic. Fluctuation in social choice, as a behavioral tendency, could be more reliably measured after groups had been together for a longer period of time. The third administration of the preference inventory was made when group members had been in daily contact over a five-week period.

Scores on the post administration of the Dogmatism Scale were matched with fluctuation scores for each subject. Statistical analysis of this material involved the computation of Pearson's product-moment coefficients.

Results indicate the dogmatism variable is not predictive of fluctuation in social choice as measured in the present study.

B. **Part Two**

Approximately eighty-five subjects were excluded from the total research sample of **Part One**
for the purpose of testing the effects of situational praise and approval upon variability in social choice. These subjects were students enrolled in two group discussion classes taught by the present writer.

Because of the dual role of researcher and instructor, it was desirable for the subjects to be unaware of the former's identity. Somewhat elaborate care was taken to create the impression that the instructor was merely an agent of two "researchers" connected with the "department". The instructor's role was one of data collection only, as subjects were led to believe, and knowledge of the purposes of the research, as well as subjects' responses were alien to this function. Some evidence of the success of this procedure came from subjects' inquiries as to the identities of the "researchers" and purposes of the study after all research material had been collected.

Data from the first and second administrations of the preference inventories were analyzed for each experimental group for the purpose of identifying the two least-preferred members of each group. This was done by tallying the number of times all group members were ranked in last, or in second from last
positions on each criterion. The two least accepted members of each group were designated "target" subjects for experimental treatment. Like members of control groups were not identified until the termination of the treatment in order to control for possible experimenter bias.

The experimental treatment, described at some length earlier in this paper, consisted of giving praise and non-verbal cues signifying approval to the communications of recipient subjects over a two-week period. Group discussions were recorded on tape a few days before and during the experimental period on the pretext that the instructor was considering the efficacy of this taped material for use as a possible evaluative measure of group discussions.

The design of this section of the research followed closely that of Tolman (18) in that cognition was used as an intervening variable between the stimulus situation and the behavioral response. The independent variable, therefore, was the unit of praise and approval directed to target members of small groups. The goal was, through the perceptions of non-target members of the group,
to change cognitions previously established concerning these subjects from a negative to a more positive direction.

After all research material had been collected, group status scores were computed. These differ from fluctuation scores in that they were based on simple unweighted rank positions. Following a pre and post-treatment design, these scores were summed over the first and second preference inventories and a mean taken, yielding pre-treatment mean rank scores for all recipient and control subjects of equally low group acceptance.

An identical procedure was used for these subjects over a third and fourth preference inventory, yielding post-treatment mean rank scores.

Statistical analysis of pre and post-treatment mean rank scores for experimentals and controls was made by means of an analysis of variance technique for repeated measures (20).

Results indicate that situational praise and approval is related to variability in social preference in a highly significant manner. Recipient subjects, as contrasted with controls, gained significantly in group acceptance as a function of
experimental treatment. Thus, it must be assumed that cognitions concerning these subjects did, in fact change from a negative to a positive direction.

Research possibilities include a more direct assessment of specific factors involved in the influences of experimental treatment upon recipient subjects. At present, results are somewhat confounded by the lack of direct measurement of these factors. For example, the quantitative aspects of recipients' speech patterns is one factor which may prove of interest. It might be predicted that recipient subjects become increasingly verbal as a function of treatment variables directed to them in the group situation.

Perhaps a more interesting design would be one which varied the two components of the experimental treatment used in the present study, i.e., verbal praise and non-verbal cues signifying approval. These two aspects may be differentially effective in that verbal praise may be more relevant to shaping cognitions of the group about recipient subjects; and non-verbal cues of approval more relevant to changes in recipients' self-perceptions.
This would involve a replication of the present study adding measurements of recipients' and controls' self-perceptions. It may not be possible, however, to do this efficiently, as all subjects would have to be measured. Limiting measurements to only recipient subjects and their controls would tend to weaken the validity of the results of the basic design.

Of necessity, a series of measurements would have to be made. In this way an individual base rate relating to changes in self-concepts could be established prior to experimental treatment making any gross deviations from this established average specifically related to experimental factors rather than to those of chance.

The results of the present study imply that social choice may not be only a function of the "personality" factors of the individual, but may be related to the perceptions of others about the individual as they are shaped by events occurring within relatively specific situations. Therefore, the individual is seldom judged for what he is but for how he appears to be, and how he appears may be highly relevant to situational events.
This serves as a partial explanation as to why two or more individuals fail to see a third person in the same way. It is not that the third individual is so variant in his behavior as much as it is that the perceivers have witnessed the behavior of this individual in a series of discriminately different situational contexts.

A third element, related to "personality" are the "expectancy patterns" of the perceiver. These may involve learned expectations of what behavior is appropriate in a specific setting, which arise from past experiences within similar situations. The judgment of others, and hence choice, may depend to some extent upon the degree of discrepancy existing between expectations for behavior in a situation and the immediate behavior of the person or persons being judged.

No doubt, the judgments involved in social choice are related to these expectancy patterns which interact with situational events in determining how and whom the individual will choose or reject.

Thus, while situational factors regarding social choice appear to be of importance, more research is needed as to how these interact with
the unique patterns of response of the individual in determining social preference.
BIBLIOGRAPHY


2. Budden, J. A study of the degree of consistency of social acceptance of pre-school children in a nursery school setting. (Unpublished student research), Univ. of Toronto, 1943


APPENDIX I
PREPARED STATEMENT
OF INSTRUCTIONS TO SUBJECTS

This class has been chosen to participate in an important research project. Every effort has been made to keep your responses to the research items strictly confidential. It is asked that you do the same. Do not discuss any of your responses with anyone.

The project consists of two parts; first, an Opinionnaire, in which you are asked to give your degree of agreement or disagreement with statements concerning opinions much like those you hear from day to day.

The second part is a ranking task, and concerns the ranking of members of your group on three criteria. This task will be repeated at intervals so do not hesitate ranking group members because of lack of information. All that is asked is that you use the information you have at the time of ranking.

If you are absent at the time any of the tasks are given, you are expected to make it up immediately. Any loss of any part of the data means your previous effort and time as well as that of your group members is wasted.
Because it is from research that we gain our knowledge of human behavior, it is asked that you take this task seriously and make your best effort to respond carefully and as to how you honestly feel.
1. List below the names of all members of your group beginning with the person at your right and proceeding counter clockwise around the table. In the event of absence, put down the name of the absent member in the proper order.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
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</table>

2. Rank in the order of most to least the above group members (excluding yourself) on the following.

**ACADEMIC**

a. At present the person you would prefer to work with on a project highly influential to your grade in this course.

Rank here........1. (most)

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b. At present the person you would most prefer to associate with at a purely social level. This involves out-of-class activities only.

Rank here........1. (most)

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**FRIENDSHIP**

c. At present the person you simply like best, someone who might become your best or one of your best friends.

Rank here........1. (most)

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**NOTE:** The above is for the purpose of research only and in no way influences any subject's academic or personal present or future. After tabulation identifying information is destroyed.
APPENDIX II
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AUTOBIOGRAPHY

I, Jayne Sells Oldfield, was born in Columbus, Ohio, January 20, 1919. I received my secondary school education in the public schools of Saint Louis, Missouri and Columbus, Ohio, and my undergraduate training at The Ohio State University, which granted me the Bachelor of Science degree in 1942. In 1944, I graduated from the Katharine Gibbs School, New York, New York.

By special permission, my Master's Degree was bypassed. For the past three years I have served as a teaching-assistant in the Department of Psychology at The Ohio State University.