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PATTERNS OF CONVERSATIONAL INTERACTION AS FACTORS OF ATTRACTION AND COMPLIANCE WITHIN DYADS

KENNETH GAVIN STUART

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PATTERNS OF CONVERSATIONAL INTERACTION
AS FACTORS OF ATTRACTION AND COMPLIANCE WITHIN DYADS

by

KENNETH G. STUART

B. S., Suffolk University, 1965
M. A., University of New Hampshire, 1968

A DISSERTATION

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This thesis has been examined and approved.

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ABSTRACT

PATTERNS OF CONVERSATIONAL INTERACTION

AS FACTORS OF ATTRACTION AND COMPLIANCE WITHIN DYADS

by

KENNETH G. STUART

The primary purpose of this research was to design a set of controlled situations which allowed examination of free dyadic interaction. Exchange theory constructs postulate interaction variables that determine the on-going interaction process and the consequences of specific interactions. This research was designed to test exchange hypotheses in a relatively free conversational interaction.

Longabaugh (1963) developed a coding system (Resource-Process) that allows a conversation to be broken down into the instigation and exchange of relevant social variables. Using R-P coding for a method and risky-shift (Kogan & Wallach, 1959) items for a task, two separate studies were performed.

The first study was exploratory and specific conversational variables and resulting levels of attraction within dyads were correlated. Fifty stranger dyads performed a dyadic task that required they reach a common recommendation.
in a series of hypothetical risk items. Specific conversa-
tional variables, as measured by R-P coding, were correlated
with post-test measures of dyadic attraction.

Significant positive correlations were obtained
between attraction and the following three variables:

(1) overall distribution of resources, defined as:
the number of resources which were offered and accepted plus
the number which were sought and withheld (.82), (.75), (.91),
(.77), (.77);

(2) dyadic resource exchange, defined as: the sum
of resources offered by subject A to subject B plus the number
of resources offered by subject B to subject A minus the sum
of ignoring and rejection between A and B (.78), (.84), (.81),
(.77), (.78);

(3) relative level of information seeking, defined
as: the number of acts seeking initial or additional infor-
mation from either A or B (.75), (.68), (.65), (.81). Relative
control seeking, the number of attempts to establish
direction for task or conversation, was negatively correlated
with attraction (-.76), (-.64), (-.83), (-.84). Both the
controller and his target reported lower attraction relative
to the degree of control-seeking behavior.

The second study was an experimental test of the ex-
change hypothesis that an attractive influencer will be more
effective in eliciting compliance than an unattractive in-

fluencer. The exchange rationale is that the influencer perceived as attractive by his target will have potentially greater referent power and social reward power with which to elicit compliance.

Dyads were formed with varied levels of attraction between partners - mutually attractive dyads, mutually unattractive dyads, and attractive/unattractive dyads. In each dyad, one member was instructed to influence his partner on one item in the risk direction.

A 2 x 2 analysis of variance indicated that attractive influencers were significantly more effective than unattractive influencers (p < .01). Chi square analysis of the frequency of specific conversational variables indicated the following:

1) successful dyads made more total conversational acts than unsuccessful dyads. Successful dyads are defined as: dyads in which the target shifted his response two or more points in the direction of influence; unsuccessful dyads are defined as: dyads in which the target did not shift his response in the direction of influence or shifted less than two points.

2) successful dyads had a greater dyadic resource exchange level than unsuccessful dyads;

3) successful influencers talk more, but use fewer control-seeking responses than unsuccessful influencers;
(4) unattractive influencers used more control-seeking responses than attractive influencers;

(5) targets who did not comply used more control-seeking responses than targets who complied;

(6) among targets who complied, attractive targets talked more, sought more information, and did more control seeking than unattractive targets.
INTRODUCTION

The broad focus of this dissertation is the mutual interaction of people. An assumption is that all social psychological phenomena (attraction, social influence, leadership, etc.) are determined by a combination of external factors, internal factors, and the interaction process. External factors denote the broad range of environmental influences, and internal factors denote the range of personal or individual variables such as traits, motives, and attitudes. The process of interaction involves two (or more) members with each member's responses serving as stimuli for another member or members. No interaction can occur in isolation from the personal factors brought to the situation by each member or from the influence of the environmental or situational factors operating at that point in time.

Concern with interaction as both an on-going process and as a level of analysis is not new or unique, but methodological problems have restricted empirical work. Thibaut and Kelley (1959) point out one methodological problem inherent in the study of interaction: the traditional use of controlled independent variables viewed as antecedent to dependent variables in a causal relationship is not
clearly possible in a pure interaction format. The interaction is not under the precise control of the experimenter, as the "control" over the situation rests with the individuals.

The experimenter can specify the circumstances or external factors within which the interaction will occur. Individual factors can be partially controlled by pre-selection of subjects according to some specific criteria. The experimenter sets the stage for the interaction by controlling external and internal factors. The actual process of interaction that then occurs in the most carefully set stage can operate in a variety of ways related to the dynamics of the interaction which unfolds. Careful stage setting does not afford control over the direction and pattern of the interaction.

Thibaut and Kelley (1959) doubt that a meaningful breakdown of dependent and independent variables is possible in the interaction situations. Control can be gained by allowing the subject to think he is interacting with another person, but the other's responses have been predetermined by the experimenter. The experimenter has gained control, but has lost the interaction and is dealing with the behavior of a single person, not with the interaction between persons. It must be conceded that, as a level of analysis, interaction presents serious control problems. There must be adequate
control to afford interpretive data, but an over-concern with methodological niceties must not be permitted to prevent the occurrence of legitimate and spontaneous interaction.

The simplest unit in which social interaction is possible is the dyad. The dyad can be defined as any two persons engaged in an activity that requires each to modify his behavior or responses depending on the responses of the other. Woodworth (1925) recognized that the personal (psychological) factors of each member of a dyad does not adequately describe a dyadic interaction.

Two boys, between them, lift and carry a log which neither could move alone. You cannot speak of either boy as carrying half the log, in any concrete sense, for the log is not always in halves. Nor can you speak of either boy as half carrying the log. The two boys, coordinating their effort upon the log, perform a joint action and achieve a result that is not divisible between the number of this elementary group. To insist that the pair of boys consists simply of the two individuals is to commit an abstraction. It leaves out the log. By acting together upon the same object, the individuals composing the group (dyad) coordinate their behavior, so the total behavior consequently possesses a unity analogous to that of a group of muscles in a coordinated movement (Woodworth, 1925).

The combined responses of persons A and B are not dyadic data. The dyadic situation may well influence and be reflected in their combined responses, but the interaction process has been lost and the parameters and dynamics of the interaction are either ignored or postulated post hoc on
the basis of the outcome of the dyad. The mean response of two persons is not dyadic data. The interaction may be reflected in the mean data and the interaction dynamics postulated to account for the data.

The dyad is the most elementary social unit and therefore offers the simplest analysis. Exchange theory is an approach which provides the constructs and operational assumptions necessary for the empirical investigation of the interaction process.

Homans' (1961) theory of elementary behavior and Thibaut and Kelley's (1959) theory of interaction outcomes focus on the formation, maintenance and outcomes of dyadic relationships in terms of a behavioristic-economic model. Both theories are exchange theories; they postulate the exchange of social and material rewards and cost as the determiners of interaction behavior. The exchange model is sometimes described as an economic model because of the analogy between the exchange of goods in the marketplace and the exchange of rewards and cost in a social interaction. Both frameworks are a contemporary reflection of hedonism and a modified law of effect. While all exchange (economic) models are behavioristic and employ the assumptions and terminology of learning theory, they actually make their reference back to an individual's motivation for certain behavior under specified circumstances. As exchange concepts and inferences
tend to be more motivational and cognitive rather than operant and behavioristic, it is important to recognize the degree of hedonistic assumption inherent in the models.

Thibaut and Kelley (1959) define dyadic interaction as occurring when two people emit behavior in one another's presence. The dyadic behavior is organized into sets or behavioral sequences for purposes of analysis. Instrumental sets are goal oriented and move one individual (or both) toward a goal. Consummating sets are part of the consummation process. In the instrumental conditioning paradigm with food as a reinforcer, the behavior the animal exhibits as he obtains and consumes the food is the consummation process. This is the actual use or utilization of the reinforcement. Applied to social research, the consummation process involves behavioral sequences that utilize the reward factors introduced by a member of the interaction or are obtained from a source external to the interaction. These sets are analyzed by use of an outcome matrix. All potential repertoires of behavior for each member are plotted on a different axis. The relative goodness of outcome for each set of behavioral alternatives is listed. Outcome is a combination of reward and cost factors and is positive to the degree that reward outweighs costs and negative to the degree that cost outweighs reward.
Homans' (1961) theory of elementary behavior blends Skinnerian assumptions, hedonistic point of view and economic terminology and applies them to face-to-face social situations. In any social situation the individual potentially incurs rewards and costs. The relationship between rewards and cost, and behavior is simple: Reward - Cost = Profit (or Loss) concept and Thibaut and Kelley's outcomes are similar constructs.

For the purposes of this research, exchange theory is considered as a single framework. This does not imply that all exchange theories have identical assumptions, constructs or hypothesized relationships between variables, but at an elementary level there are similar assumptions and near identical constructs. Thus, exchange theories offer similar basic predictions and hypotheses about certain face-to-face social phenomena and it is at this elementary level that this research is focused.

Attraction

Exchange theories view attraction as a function of the degree to which persons achieve a reward greater than cost outcome in their interaction that exceeds some minimal level of reward expectation.

Homans' (1950) interpretation of Jennings' (1950) work with over and under chosen girls points out that girls
received high sociometric ratings to the degree that their behavior has been rewarding to those judging them. Bonney, Hobit and Dreyer (1953) found similar results with male college undergraduates.

Secord and Backman (1964) have applied a process analysis to interpersonal attraction. Friendship formation is conceptualized as the on-going process of sequential events and stages leading to friendship. At first meeting, certain persons may be sought out on the basis of estimates of potential rewards and cost sampling. Personal preferences, perceived status, proximity, competition, and other variables, including random factors, determine if a particular dyadic interaction is ever initiated; this is the estimation stage. The next stage is interpersonal bargaining - a giving and seeking of information concerning interests, attitudes, expectations and other relevant information that allows both parties to make personal judgments as to what the other person has to offer and the degree to which it is deemed potentially rewarding. If either person does not perceive a potentially positive set of outcomes relative to alternative interactions then that interaction will come to a polite end. In other words, the process of sampling and estimation is a descriptive concept. It describes the factors involved as a particular dyad initiates an interaction. The degree of attraction for
both members is a result of both preconceptions brought to
the interaction and the personal judgments arrived at during
the mutual bargaining process.

Longabaugh's (1963) coding system formed the research
tool used in an attempt to gather correlational data on the
bargaining process in the first part of this study. This
coding system (Resource-Process) has been developed to ex­
amine exchange theory variables and focuses on the concept
of resource exchange as the basis of interpersonal interaction.
The instigation of resources and their disposition are the
conversational or interaction data that the Resource-Process
coding system attempts to quantify.

Alternative coding systems, Bales (1950), Freedman,
Leary, Ossorio, & Coffey (1951), Conrad and Conrad (1956),
Bion-thelen (1954), etc., were not designed to quantify ex­
change concepts. They are less appropriate than R-P coding
for testing hypotheses drawn from exchange theory or for
gathering data with the intention of generating exchange
hypotheses. The determining factors of exchange theory
that lead to some level of attraction by both participants
should be reflected in verbal communication of a dyad.

Conformity

When one individual changes his behavior in response
to overt pressure from another, he is complying. The target person may have changed his private view or attitude and conformed or he may have complied by merely modifying his response but not changing his private attitude. Compliance may be devious if the target deems it useful to appear conforming or compliance may be open compromise or capitulation. Kiesler and Kiesler (1969) point out the theoretical problems that have resulted from a confusion of conformity and compliance in much experimental work. For the purposes of this dissertation, it is not assumed that a private attitude shift has occurred. The degree of compliance that the influencer can elicit from the target person will be the measure of successful influence. It is possible that the dynamics of true conformity are quite discrete from the dynamics of compliance.

Sherif (1948) used the ambiguous stimulus situation of the autokinetic effect -- the illusion of movement by a stationary point of light in a darkened room -- to study the effect of the social stimuli (other persons responding to the light) upon each person. The three subjects' task was to report the degree of apparent movement. Subjects were apparently influenced by each other's responses, as each group tended to limit their reports of visual movement to a narrower range. This narrowing of range has been concep-
tualized as the building of a social norm. Each subject's responses were influenced by the responses of the other two -- a type of conformity toward consensus.

Asch (1956) used sets of lines of various lengths that were compared to a standard length line to study the degree to which social stimulus could influence an individual's responses on a visual problem. One subject was seated with seven confederates who, at some point, gave unanimous erroneous responses to an unambiguous stimulus situation. Some subjects responded correctly, some conformed and responded as did the other seven. All subjects experienced discomfort and an entire body of research developed to test out factors relevant to an individual's conformity or non-conformity.

Festinger, Schachter and Back (1950) suggested that the degree of pressure a group can exert on its members to conform is limited by the cohesiveness of the group. Cohesion depends on the degree to which reward-cost outcomes for members exceed their comparison levels for alteration (Secord and Backman). Cohesion and intra-group attraction may not be the same phenomena, but one is rare without the other and their operational definitions are often the same.

The empirical relationship between attraction and compliance is complex and conflicting. French and Ravens (1959) state five sources of power by which an influencer may
gain compliance from another: extrinsic rewards; legitimate power; coercion power; reward power; and referent power. Informal face-to-face social dyads usually lack extrinsic rewards, legitimate power or coercion power. Reward power and referent power are relevant to an informal dyadic interaction. French and Ravens assume that some type of power must be used by the influencer to obtain compliance or conformity. They also consider referent power, which implies identification with the influencer, as one effective source or power. This is consistent with the exchange assumptions that (a) compliance is costly (Blau, 1965), and (b) social approval is a more valued and sought commodity from a more attractive and/or similar source (Homans, 1961). Several researchers found positive correlations between attraction and conformity (Festinger, et. al., 1952; Wyer, 1966; Kelly & Shapiro, 1954). But other work (Bovard, 1953; and Willis, 1963) reported no relation between attraction and conformity. Still other researchers found negative or curvilinear relationships between attraction and conformity (McKeachie, 1954; and Kiesler, 1963).

The studies were all relatively complex forms of seeking conformity in groups of various sizes. None were strictly dyadic. The relationship between attraction and conformity may have been confounded in the more complex
patterns of interaction phenomena and experimental manipulation in their studies. Jones (1964) compiled a series of formal and informal studies which indicate that people are using compliance as a social device to seek social approval and attraction. Hollander's (1958) use of conformity for a means of gaining idiosyncracy credits is a similar concept. The following research did not attempt to pick out all the alternative explanations for the empirical discrepancies, not to try to resolve them with an alternative.

Statement of Problem

The purpose of the present research is to investigate attraction and influence in dyadic interaction by examining exchange concepts in a research setting which is simpler than more previous research.

Exchange theory describes the consequences of costs, rewards and expectations that are bound up in the social interactions and relevant to it. Social rewards, costs and expectations are cognitive phenomena and the stimuli for member A is the total situation, the responses of B, the alternative perceived by A and A's expectations. Traditional exchange and game studies that deal with external rewards and costs have avoided the variables that are postulated by exchange theory as the determiner of elementary social behavior. The basic problem is to focus on the social
resources that are exchanged in dyadic interaction rather than the effects of external, material rewards and costs.

Attraction and conformity are relatively easy to operationalize but researchers have reported conflicting results concerning their relationship. As pointed out in the Introduction, the studies all dealt with groups larger than dyads and a complex pattern of independent variables. The present research does not attempt to criticize the traditional exchange research, but the results of an interaction and not the interaction process per se are the traditional data. Since exchange theory postulates the determiners of social interaction, it can be tested by using the simplest unit of analysis (dyad) and a combination of correlational and experimental designs to focus on the interaction pattern as it unfolds.

Given the level of analysis (interaction), a theoretical framework (exchange theory), and a unit of analysis (dyad), an appropriate method was needed. Longabaugh (1963) developed a system for coding the exchange of salient resources in an interaction, R-P coding (see Appendix A for description). Interaction events are coded across two dimensions: 1) salient resources—valued events or communication that become relevant to the interaction; 2) modes—the ways
resources become salient and their eventual disposition. R-P coding was developed specifically to operationalize the exchange concept. The validity of R-P coding is not well established. Longabaugh (1963) used mother-child dyads, and obtained predicted internal correlations between the various interaction variables. Correlations between social variables such as attraction or influence, and those aspects of the interaction measured by R-P coding have not been done. If these correlations are in the directions indicated by exchange dynamics, it would increase confidence in exchange theory's conceptualization of social variables and in R-P coding as a useful instrument to measure interaction exchange variables.

This research was designed to focus on attraction and compliance in the most elementary system possible. This research is broken down into two main sections. The first section dealt with the correlation of dyadic attraction and certain R-P coding variables. A primary rule of observation is to minimize the effect of your observation. Any insight into interaction patterns, regardless of how precise the instrument, must come from some naturalistic observation. This implies correlational design and a structured, but not controlled, situation. A series of structured situations that allow two people to interact freely around a specified task and using R-P coding to reduce that interaction to useful
data might result in interpretable patterns of exchange. From each interaction, some level of attraction by each member from his partner must occur. Correlations between conversational data and resultant attraction levels seem a legitimate source of hypotheses. Any specific conversational behavior that correlates with attraction level becomes a potential hypothesis about the possible determining relationship between that verbal behavior and attraction.

The second section of this research is both exploratory and experimental. The second section deals with an attempt of one member of a dyad to influence (exact compliance) a target subject. The relative degrees of attraction (pre-existing) between the influencer and target are manipulated as the independent variable. This section is experimental and measures resultant compliance as the dependent variable. Yet the situation is simple and R-P coding data correlated with varying levels of compliance affords a look at interaction processes involved in influence -- at various levels of success.

What type of exchange patterns does a successful influencer use that might be different from an unsuccessful influencer? Some targets may be better equipped at conversational defense. How would these patterns differ from each other?
METHOD -- STUDY I

Equipment

Recording Equipment

Subjects were seated at a small table in an isolation room. Conversation was recorded on a tape recorder and also piped to an amplifier and two headphones. The two coders were seated behind a one-way mirror. The tape recording was used to resolve any coding discrepancies after the experimental session. There were a few instances when one or both coders were unable to hear a comment. The conversations were coded by Resource Process analysis. Only pencil and coding form are necessary for the coding process.

Coders

Two college senior psychology majors were trained in R-P coding with the use of Longabaugh's coding manual. Coder reliability, as suggested by Longabaugh, was calculated by dividing number of acts coded identically by different coders by the total number of acts, multiplied by 100. Coder reliability was considered satisfactory at .75. By the completion of pilot work, coder reliability had risen to .84. Coder reliability was checked twice during the running of subjects and remained over .80 for two coders.
Task

Wallach and Kogan (1959) devised a list of written problems for the investigation of individual differences in risk-taking. They presented a hypothetical situation that involved some favored outcome but with risk or possible loss. The problem for the individual was to read the problem, weigh the possible gain against the possible loss and indicate the minimum probability of success that he would demand before recommending the alternative with the more desirable outcome (see Appendix B for list of items).

These items were used as a dyadic task because there are no right or wrong answers and the situations encourage discussion. In this correlational section there was no analysis of the particular answers chosen, but the post task attraction level between dyadic members was the critical measure.

Each dyad was instructed to agree on one answer between them for each item. The resulting conversation was the conversational data.

Instructions

Each dyad was asked to come into the room and sit at the small table. On the table were two sets of questions and two pencils. One member was asked to record their
group responses on the starred questionnaire. They were told to read the following set of directions, then ask any question they had.

On the following pages, you will find a series of situations that are likely to occur in everyday life. The central person in each situation is faced with a choice between two alternative courses of action, which we might call X and Y. Alternative X is more desirable and attractive than alternative Y, but the probability of attaining or achieving X is less than that of attaining or achieving Y.

For each situation on the following pages, you will be asked to indicate the minimum odds of success you would demand before recommending that the more attractive or desirable alternative X be chosen. Read the situations carefully and decide on one answer between you for each situation. Feel free to discuss the items but you must respond to every situation as a team, giving a single answer.

**Subjects and Procedures**

Subjects were twenty-five male University of New Hampshire undergraduate students enrolled in introductory psychology. Participation in departmental experiments was required for introductory psychology students. Five subjects were paired off in all possible dyads (10 dyads) in each set. There were five sets of dyads for a total of fifty dyads. Each subject was in four dyads and had one session with each member of his set.

Each was instructed to arrive at a consensus decision
on a list of hypothetical situations (see Appendix B). These problems were some of the choice dilemma items that ask a subject to pick the degree of risks a hypothetical person should take to obtain a preferred outcome. There was no concern over what risk level a dyad responded at, merely that the items have no factual right or wrong answer and afforded room for subjects' judgment, personal bias, and for interpersonal bargaining. Two judges behind a one-way mirror coded the entire interaction. If the tasks were identical for each dyad, the social exchange involved in handling the task would influence the consequent level of attraction for each partner.

After each task completion, the partners independently filled out a post test questionnaire (Appendix C) consisting of evaluation of self, partner and task satisfaction. As each subject completed his fourth and last dyadic task, he ranked all four of his partners as to which he would most prefer to work with in a later part of the study. These data allowed the construction of a sociogram (see Appendix D) for each set of subjects and provided relative levels of attraction to correlate with coded conversational data.

Dyads were allowed to discuss the items freely. No manipulations of conditions or prior selection of specific
dyads were made by the experimenter.

All the conversational data was recorded along with post tests and sociograms. The primary focus is the correlations between conversational exchange patterns and relative attraction as measured by sociogram and rating scale.

**Exchange Variables**

The following variables are the exchange variables as conceptualized and measured by R-P coding.

**Relative Information Deprivation** -- The number of conversational exchanges that were coded as depriving information, either by ignoring a request, refusing to answer or not having the desired information.

**Relative Support Deprivation** -- The number of conversational exchanges that were coded as depriving of support.

**Overall Distribution of Resources** -- The relative possession by the dyad of resources which became salient during the observational period. This was measured by the number which were sought and withheld. This variable is the combination of what is given and what is deprived.

**Dyadic Support Exchange** -- The number of conversational acts that were coded as giving support either in response to seeking support or an unsought support that was accepted.
**Dyadic Resource Exchange** -- The quantity of resources that are exchanged within a given dyad. Dyadic resource exchange equals the sum of resources offered by subject A to subject B plus the sum of resources offered by B to A, minus the sum of rejection and ignoring between B and A.

**Relative Information Seeking** -- The number of conversational acts that were coded as seeking initial or additional information from either A or B.

**Relative Support Seeking** -- The number of conversational acts that were coded as seeking support from either A or B.

**Relative Control Seeking** -- The number of conversational acts that were coded as an attempt to establish direction of conversation or the specific response to the dyadic task.

**Relative Control Deprivation** -- The number of ignoring or rejecting responses to a partner's previous control-seeking act.

**Attraction Measures**

**Sociogram**

After each subject had completed four dyads he ranked his four partners in order of preference for partners in a further experimental task (for an example, see Appendix D).
Post Test

After every dyad, each member filled out the following questionnaire about his reaction to the task, his partner and his perception of the partner's reaction to him.

1. Your partner was 1 2 3 4 5
   bright average dull

2. Did you agree with your partner's discussions?
   1 2 3 4 5
   always sometimes never

3. Your partner viewed you as 1 2 3 4 5
   bright average dull

4. Did your partner agree with your suggestions?
   1 2 3 4 5
   always sometimes never

5. In a similar situation would you be willing to have the same partner?
   1 2 3 4 5
   yes maybe no

6. Do you think your partner would be willing to work with you at a similar task?
   1 2 3 4 5
   yes maybe no
RESULTS -- STUDY I

The correlation between the two measures of attraction, sociogram ratings and post test response, was high positive ($r = .87$). This was a check for the validity of the measures of attraction. The two measures, sociogram rank and degree of willingness to have same partner in the future, were summed as a measure of total dyadic attraction for each dyad. The resulting dyadic attraction was correlated, using person product moment coefficient, with the conversational exchange variables (Table 1).

Three exchange variables were significantly positively correlated ($p \leq .05$) with the dyadic attraction level in at least four out of the five sets of dyads. They were the overall distribution of resources (.82, .75, .91, .77, .77), the dyadic resource exchange (.78, .84, .81, .77, .78), and the relative information seeking (.75, .68, .65, .81). Only control seeking was significantly negatively correlated with the attraction level (-.76, -.64, -.83, -.84). Exchange theory would predict negative correlation with deprivation measures. There were very few deprivations in the experimental dyads of either support or information. Less than 2% of the total conversational acts were coded as depriving of information or support.
Table 1

Correlations between R-P Coding Variables and Resulting Attraction Level for
Five Sets of Dyads - Ten Dyads to a Set

<table>
<thead>
<tr>
<th>Resource Processing Variables</th>
<th>Sets</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Relative information deprivation</td>
<td>-.27</td>
</tr>
<tr>
<td>Relative support deprivation</td>
<td>.10</td>
</tr>
<tr>
<td>Overall distribution of resources</td>
<td>.82*</td>
</tr>
<tr>
<td>Dyadic support exchange</td>
<td>.16</td>
</tr>
<tr>
<td>Dyadic resource exchange</td>
<td>.78*</td>
</tr>
<tr>
<td>Relative information seeking</td>
<td>.44</td>
</tr>
<tr>
<td>Relative control seeking</td>
<td>-.76*</td>
</tr>
<tr>
<td>Relative control deprivation</td>
<td>-.31</td>
</tr>
<tr>
<td>Relative support seeking</td>
<td>.23</td>
</tr>
</tbody>
</table>

* p < .05
Support seeking and deprivation resulted in no significant correlations. The task was a relatively impersonal one that apparently did not require or encourage supportive exchanges as less than one percent of the conversational exchanges were coded as seeking, giving or depriving of support. A dyadic task that more directly involved each member in personal commitments might elicit a higher rate of support involved acts. The members of the experimental dyads were strangers and with the exception of some possibly tension-reducing joking, confined their interaction to giving arguments, examples and possible consequences of the various risk levels in the hypothetical situations. Thus the bulk of the conversational exchanges involved information and control ($\approx 90\%$).

The only significant negative correlations were for the relative control seeking variables. The greater the number of attempts to establish control, the less the attraction level of the dyad. Table 2 breaks down the correlations between the attraction for each partner and successful and unsuccessful control seeking. A successful control-seeking act was defined as the acceptance by the target of a direction or behavioral response sought by his partner. An unsuccessful control-seeking act was defined as the ignoring or rejecting of the direction by the target. Regardless of the success or lack of success of the control seeking, it correlated negatively ($p < .05$) with the attraction for both partners.
Table 2

The Correlations between the Number of Control-Seeking Acts and the Level of Attraction

<table>
<thead>
<tr>
<th>Attraction Level</th>
<th>Instigator of Control Seeking</th>
<th>Target of Control Seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Successful</td>
<td>-.87*</td>
<td>-.73*</td>
</tr>
<tr>
<td>Seeking Unsuccessful</td>
<td>-.79*</td>
<td>-.69*</td>
</tr>
</tbody>
</table>

* p < .05

The correlations were broken down between successful and unsuccessful attempts to control and the attraction level for target and instigator of the control. This table is only for visual inspection of the four correlations. No analysis of difference or relationship is implied.
The successful controller was not attracted to his target any more than the unsuccessful or attempted controller. These correlations were not independent since in most dyads where the frequency of control attempts were high, first one member, then the other member would seek control.
DISCUSSION -- STUDY I

Significant positive correlations were found between attraction and three exchange variables -- overall distribution of resources, dyadic resource exchange and information seeking. Significant negative correlations were found only between attraction and control seeking.

Willingness to continue with the same partner in a similar task increased with the amount of resources actually given and sought. In typical high attraction dyads there were a large percentage of information seeking and giving acts. Resources were not only available, they were sought out, given and accepted to a greater degree in high attraction dyads.

One obvious limitation of such a simple correlational study is the lack of knowledge about the temporal sequence of possible events. Did a particular pair of subjects develop attraction for each other (relative to other partners) because of the conversational exchanges? Or did a particular pair form an attraction on non-verbal cues or personal attitudes and then the conversational pattern reflect this positive affect situation? One possibility is that certain exchange patterns influence higher degrees of attraction between members. Another is that the relative degrees of attraction result in characteristic conversational patterns.
High attractions might then account for each member of the dyad perceiving his partner as possessing resources of value. This would account for the higher exchange rate.

A possible check for this in future research would be to gather sociogram data within the first few minutes of the dyadic task, then another measure of attraction at the end of the interaction. Any change in the attraction levels that correlated with exchange variables would strengthen the exchange theory position that attraction is being built by exchanged and perceived units of value.

An interesting and less ambiguous set of correlations dealt with control seeking (Table 1). Control-seeking responses correlated negatively with attraction for the total dyad. Table 2 breaks the correlation down into measures between successful and unsuccessful controllers and their targets.

The constant control seeking in a dyad is obviously what is commonly termed an "argument" and one isn't too surprised by the amount of arguments being negatively correlated with attraction. Not so easily explained is the controller reporting low levels of attraction for the target whether or not the target tended to submit. The attempt to control at all might be the behavioral consequence of the member perceiving no value or potential value in his partner's resources. The submission to or rejection of this control would not
affect the controller's evaluation of the other's resources. Possibly the controller's low opinion of his partner's resources led to the controlling attempts rather than the controlling attempts being a factor in some developing lower opinion of controller for the target. Again, a temporal ambiguity prevents any confident interpretation of the correlations but gives rise to some interesting hypotheses for controlled experiments. One could use dyads with varied established levels of relative attractiveness and test the hypothesis that attraction level would drop for those partners who used the greater degree of control or control attempts.

The target's evaluation of the controller was lowered to the degree that the other attempted to establish control, regardless of the target's ability to resist.

Was the target reacting to the attempt of another to limit his freedom? Did the target interpret the other's responses as devaluing the target's resources? Either way would result in low attraction for controllers.

Only questions are raised in this section. That was the purpose of taking an unmanipulated correlational view of dyadic task interactions. The correlations could be interpreted several ways, but did raise interesting experimental questions.
PART II

Influence

Exchange theory offers dynamic explanations for much of the data on conformity and persuasion. The former is the acceptance of some norm or standard and the latter refers to any kind of influence attempted by a communicator. There is a substantial amount of published material dealing with influence in groups and dyads. Homans (1961) and Thibaut and Kelley (1959) report representative research and have elaborated on the results according to the principles of exchange theory.

The construct "influence" is not independent of other constructs. For convenience, this research focused on selected aspects of influence as diagrammed by exchange theory. Influence is eliciting some degree of compliance from the target subject. This may be only public and not involve any private acceptance.

Ross' (1921) "Law of Personal Exploration" states basically that the person who cares less can exploit one who cares more. Or as stated by Waller and Hill's (1951) "Principle of Least Interest", ....that person is able to dictate the conditions of association whose interest in the continuation of the affair is less. Anyone who has ever
flipped out over an unimpressed female can understand that a person can influence if he has the power (or perceived power) to increase rewards or cut costs for others. Homans expressed the exchange view most clearly when he stated that influence occurs when activity (changing of expressed attitude) is exchanged for sentiments of social approval. In other words, the person must give or promise to give something of value to the person he is trying to influence. When the person has no valued rewards to offer, nor is perceived as able to reduce the other's costs, then there will be no influence. The Ross and Waller and Hill positions are, according to exchange concepts, situations where A has some valued commodity for B. The fact that B cares or is interested indicates that continued interaction with A will be rewarding for B. The fact that A does not care or is not interested indicates that the relationship with B is not perceived as rewarding for A. A is in the position of being capable of influencing B's behavior to raise the rewards for A. B will be influenced or change his behavior even if it increases his own costs to continue what B perceives as a rewarding relationship. Obviously, if A's demands raise B's costs (or reduces his rewards) to the point that B no longer perceives a profit in the relationship, then B will terminate the interaction. Or if A does not perceive any activity or
sentiment from B as potentially rewarding, A would not be motivated to attempt to influence B.

Within the framework of exchange theory, a test of the relationship between compliance and attraction requires a relatively free interaction between influencer and target. The situation in which the interaction occurs may be structured but the conversation or interaction must be determined by target and influencer.

This design attempts to afford the necessary experimental controls while allowing a free interaction. The following exchange hypothesis is tested: The attractive influencer will be more effective in eliciting compliance than an unattractive influencer.
METHOD -- STUDY II

Study II is experimental. Dyads were formed with varied levels of attraction between partners: mutually attractive dyads; mutually unattractive dyads; and attractive/unattractive dyads. In each dyad, one member was instructed to influence his partner on one item in the risk direction. The difference score between the target's prior, private response on the critical item and the consensus report of the dyad was the dependent measure.

Equipment and Coders

Equipment and coders are the same as described in Method I.

Task

The task is the Wallach and Kogan problems described in Method I.

Stoner (1961) and Kogan and Wallach (1964) demonstrated that a group of subjects tended to take riskier positions than they had originally taken privately. This phenomenon was labeled risky-shift. Wallach and Kogan (1965) reported that discussion alone accounted for a shift to a riskier position. As this research is designed to study influence, a reliable base line response on each item is critical. Allowing the
subjects to discuss the questions with each other and then fill out their private report minimizes the chance for additional information to produce a risky-shift.

Item 4 concerns a college senior who has the opportunity to become a physician, with near certain prestige and financial reward, or attempt a musical career as a concert pianist. This item showed a reliable tendency to elicit conservative responses. Subjects recommended chancing a musical career only if the odds of success were high. As subjects responded to this item conservatively, it was chosen to be used as the influence item. Confederates were instructed to attempt to elicit the riskiest possible response from their partner on Item 4.

Subjects

Subjects were 60 male undergraduates enrolled in Introductory Psychology at the University of New Hampshire and required to participate in departmental research. Twenty subjects were volunteer male undergraduates from Nasson College.

Procedures

Subjects were first put in groups of 20. The twenty subjects were seated in a large circle, each given a set of task items, and given the following instructions:
You should each have a questionnaire with seven problems. Read the instructions carefully, please. Look up at me when you have finished. Are there any questions about the problems?

I want you to discuss these problems and come to a consensus on as many as you can. Appoint one of the group to record the consensus answer, regardless of whether you can agree on all or any of the items. Please put your own answers in your copy. Your code number is on the front so names will not be necessary.

I'll come back in 30 minutes to collect your private answer and the consensus answers. Any questions?

After the 30 minutes were up, the researcher returned, collected the papers, and handed out papers with their code letters on it. The following instructions were given:

You will notice that each chair has a letter (A-T) in front of it. Please use these letters to refer to the person seated in that chair.

You were told this was a two-part experiment; we will schedule you for the second part in a little while. You will be working in pairs during the second section. Please rank the members of the group starting with the one you would most prefer to work with down to the least preferred. The first letter on your paper should be the letter in front of the person you would prefer to be paired with. Any questions?

The subjects were given an opportunity to interact with each other and form some preferences. The group discussion also afforded a chance to discuss the items and reduce any shift to risk phenomena later. On the basis of
these rankings, subjects were paired off into the following groupings:

**Mutually attractive dyads.** Each subject had ranked the other first or second.

**Mutually unattractive dyads.** Each subject had ranked the other last or second from last.

**Attractive/unattractive dyads.** One subject had ranked his partner first or second while his partner had ranked him in the last three.

Obviously, there was no way to predict the number of usable dyads that could be found from each group. Most subjects were released after the first group meeting and only the subjects formed into usable dyads were the subjects of the experiment. Groups were run until all four sets had been filled -- 10 dyads to a set.

The forty experimental dyads were used in the following sets: (1) mutually attracted (10 dyads); (2) mutually unattracted (10 dyads); (3) attractive/unattractive (10 dyads) with the attractive member as the influencer; (4) attractive/unattractive (10 dyads) with the unattractive member as the influencer.

Each dyad was run separately but in the same physical system as Method I. Before the dyad was seated, the member picked to be the influencer was taken to another room on the
pretext that some responses on his group testing had been confusing. While away from his partner he was instructed as follows:

I want you to try and get your partner to agree to as risky as possible a decision on Item 4 - the one about being a concert pianist. No matter how you feel about the item, try to get him to agree to the riskiest answer (1 in 10) or as close as you can. The other items you can take any position you want to on. Do you understand?

Subjects fell into the spirit of this idea and seemed to enjoy trying to talk the other fellow into something. The open instruction to "con" or manipulate was usually received with enthusiasm.

The consensus data from the dyadic task was the post-influence risk level. The subject's private report from the prior group task was the pre-influence risk level. If the post-influence consensus was two (out of seven) scale units away from the subject's private report, in the direction of influence, the target was considered as having elicited a degree of compliance. This differentiation allowed a sorting of successful and unsuccessful dyads, a series of $x^2$ tests on the conversational patterns used by influencers and targets -- successful and unsuccessful.
RESULTS -- STUDY II

The degree of compliance was predicted to vary as a function of the level of attraction that the target reported toward the influencer. Following exchange logic, it was hypothesized that attractive influencers would elicit a greater degree of compliance from targets than unattractive influencers.

A secondary focus of the design was an exploratory examination of conversational pattern used by influencers and targets.

The difference scores between the private pre-test and the consensus dyadic response is summarized in Table 3. A one-way analysis of variance of difference scores was performed on these differences. Results are summarized in Table 4.

The dyadic consensus risk levels differed significantly, in the direction of influence, from the private pre-test levels. This analysis offered confidence that the confederates in the dyads were effective in eliciting compliance from their targets. The primary concern was to test the hypothesis that attractive influencers are more efficient than unattractive influencers.

To approach this question, a 2 x 2 factorial analysis
<table>
<thead>
<tr>
<th>Mutually Attractive</th>
<th>Mutually Unattractive</th>
<th>Attractive Influencer Unattractive Target</th>
<th>Unattractive Influencer Attractive Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>-1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>-1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
<td>-1</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>5</td>
<td>-1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

\[
\sum D = \frac{3}{36} \quad \frac{2}{16} \quad \frac{3}{32} \quad \frac{1}{2}
\]

Negative numbers are shifts in the conservative direction; shifts in the reverse of the attempted influence.
Table 4

One-way Analysis of Variance of Difference Scores Between the Subject's Private Response of Risk Level Prior to Influence and the Dyadic Consensus Response under High Risk Influence

<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>Treatments</td>
<td>73.10</td>
<td>3</td>
<td>24.37</td>
<td>35.32**</td>
</tr>
<tr>
<td>Errors</td>
<td>25</td>
<td>36</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>98.1</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01

of variance with attraction levels of influencers and targets as main effects was performed. Results are summarized in Table 5.

Table 5

A 2 x 2 Factorial Analysis of Variance of the Relative Effectiveness of Attractive and Unattractive Influencers with Attractive and Unattractive Targets

<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>Influencer (A)</td>
<td>28.9</td>
<td>1</td>
<td>28.9</td>
<td>12.9*</td>
</tr>
<tr>
<td>Target (B)</td>
<td>4.9</td>
<td>1</td>
<td>4.9</td>
<td>2.19</td>
</tr>
<tr>
<td>Interaction (A x B)</td>
<td>3.6</td>
<td>1</td>
<td>3.6</td>
<td>1.61</td>
</tr>
<tr>
<td>Within groups (error)</td>
<td>80.7</td>
<td>36</td>
<td>2.24</td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>118.1</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

Risk levels run from seven (most conservative) to one (most risky).
The final or dyadic consensus risk levels attained in each dyad was the dependent variable (Table 6).

### Table 6

<table>
<thead>
<tr>
<th>Dependent Variable is the Dyadic Consensus Risk Level under High Risk Influence on Item 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influencer</td>
</tr>
<tr>
<td>Attractive</td>
</tr>
<tr>
<td>Attractive</td>
</tr>
<tr>
<td>Unattractive</td>
</tr>
</tbody>
</table>

The level of attraction of the influencers was the significant main effect, $p < .01$. Neither attraction level of the target nor the interaction was significant. The hypothesis that effective compliance was a function of the level of attraction of the influencer was supported.

The prediction that an attractive influencer would be a more efficient influencer is in line with basic exchange logic. Assuming that the reported attraction levels reflect the target's perception of potential value from further interaction with the person.

The Resource-Process coded data of all dyadic exchanges allowed an exploratory look at specific types of interaction in specific situations. For the purpose of analyzing the frequency of specific conversational variables
the dyads were broken down into a successful/unsuccessful dichotomy.

A successful dyad was defined as any dyad that resulted in a response shift of two points or greater in the direction of influence.

An unsuccessful dyad was defined as any dyad that resulted in a response shift of less than two points in the direction of influence. Four dyads resulted in a shift in the reverse of the influence attempt.

Tables 7, 8, and 9 summarize the breakdown of dyads and the respective frequency of conversational data for dyadic conversational patterns across successful and unsuccessful dyads. Successful dyads were further broken down into frequency of specific conversational variables of attractive influencer versus unattractive influencer, and attractive target versus unattractive target. As there was only one attractive influencer who was unsuccessful and four unattractive targets who resisted influence, analysis of the patterns of responses in unsuccessful dyads was not possible.

Chi-square analysis of the frequency of specific conversational variables are summarized in tables 7, 8, and 9. Dyadic support exchanges did not differ significantly from expected frequencies between the successful and unsuccessful dyads. Successful dyads had a significantly
Table 7

Breakdown of R-P Coding Variables as to Frequency of Occurrence in Successful and Unsuccessful Dyads

<table>
<thead>
<tr>
<th>CONVERSATIONAL VARIABLES</th>
<th>TYPE OF DYAD</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-P Coding</td>
<td>Successful Dyads</td>
<td>Unsuccessful Dyads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(N = 25)</td>
<td>(N = 15)</td>
<td></td>
</tr>
<tr>
<td>Dyadic Support Exchange</td>
<td>Observed</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>46</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>$x^2 = .52$</td>
<td>non-significant</td>
<td></td>
</tr>
<tr>
<td>Dyadic Resource Exchange</td>
<td>Observed</td>
<td>1487</td>
<td>737</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>1394</td>
<td>834</td>
</tr>
<tr>
<td></td>
<td>$x^2 = 18.05$</td>
<td>$p &lt; .01$</td>
<td></td>
</tr>
<tr>
<td>Total Number of Conversational Acts</td>
<td>Observed</td>
<td>1976</td>
<td>1043</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>1887</td>
<td>1132</td>
</tr>
<tr>
<td></td>
<td>$x^2 = 11.2$</td>
<td>$p &lt; .01$</td>
<td></td>
</tr>
</tbody>
</table>

These three variables are collective and combine the response of both members of the dyad. A further breakdown of individual member responses is summarized on Table 8.
Table 8

Breakdown of R-P Coding Variables as to Frequency of Occurrence Across: (1) Successful and Unsuccessful Influencers; and (2) Complying Targets and Targets who did not Comply

<table>
<thead>
<tr>
<th>CONVERSATIONAL VARIABLES</th>
<th>INFLUENCERS</th>
<th>TARGETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R-P Coding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Successful</td>
<td>Unsuccessful</td>
</tr>
<tr>
<td></td>
<td>N = 25</td>
<td>N = 15</td>
</tr>
<tr>
<td>Total Number of Conversational Acts</td>
<td>Observed</td>
<td>1061</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>1011</td>
</tr>
<tr>
<td></td>
<td>$x^2 = 6.59$</td>
<td><em>p &lt; .05</em></td>
</tr>
<tr>
<td>Number of Information-Seeking Acts</td>
<td>Observed</td>
<td>337</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>751</td>
</tr>
<tr>
<td></td>
<td>$x^2 = 26.29$</td>
<td><em>p &lt; .01</em></td>
</tr>
<tr>
<td>Number of Control-Seeking Acts</td>
<td>Observed</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>$x^2 = 12.11$</td>
<td><em>p &lt; .01</em></td>
</tr>
</tbody>
</table>

The criteria for a successful influencer or a target who complied was a risky-shift of two points or greater between target's private report and the dyadic consensus.
Table 9

Breakdown of R-P Coding Variables as to Frequency of Occurrence Relative to the Attractiveness or Unattractiveness of Influencers and Targets in Successful Dyads. (The criteria for successful dyads was a response shift of two or more points in the direction of influence.)

<table>
<thead>
<tr>
<th>CONVERSATIONAL VARIABLES* (R-P Coding)</th>
<th>SUCCESSFUL DYADS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Influencers</td>
</tr>
<tr>
<td>Total Number of Conversational Acts</td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>815</td>
</tr>
<tr>
<td>Expected</td>
<td>806</td>
</tr>
<tr>
<td>$x^2 = .46$</td>
<td>non-significant</td>
</tr>
<tr>
<td>Information-Seeking Acts</td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>652</td>
</tr>
<tr>
<td>Expected</td>
<td>644</td>
</tr>
<tr>
<td>$x^2 = .42$</td>
<td>non-significant</td>
</tr>
<tr>
<td>Control-Seeking Acts</td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>107</td>
</tr>
<tr>
<td>Expected</td>
<td>167</td>
</tr>
<tr>
<td>$x^2 = 98.6$</td>
<td>$p &lt; .01$</td>
</tr>
</tbody>
</table>

*Support-seeking responses were not included as there were too few to allow analysis.
higher number of total conversational acts. As the time element was constant, this indicated a higher rate of interaction in successful dyads.

Successful dyads also exhibited a higher dyadic resource exchange (Table 7). There were more resources offered and accepted. The dyadic resource exchange is obviously not independent of the total number of conversational acts, but takes into account the degree of acceptance of the resources offered and the relative lack of rejection. An interaction that involved a high level of seeking and rejection might have a high exchange rate but a relatively low rate of dyadic resource exchange.

Table 8 is a breakdown of the frequency of conversational variables of successful and unsuccessful influencers and the frequency of conversational variables of the target who complied and the target who did not comply. Successful influencers made more total conversational acts and more information-seeking acts than the unsuccessful influencers. Successful influencers made significantly fewer control-seeking acts than unsuccessful influencers. Even though influencers made more total conversational acts, the frequency of control-seeking acts was less than by unsuccessful influencers.

There were no significant differences in the frequency
of total conversational acts or information-seeking acts between targets who complied and targets who did not comply. Non-complying targets did make significantly more control-seeking acts than targets who complied.

Table 9 is the breakdown of the successful dyads (25) that resulted in the target shifting his response two points or more in the direction of influence. These dyads were comprised of a successful influencer and a target who complied to some degree. There was no significant difference between attractive and unattractive successful influencers for total number of conversational acts or number of information-seeking acts. Unattractive influencers had a significantly higher level of control-seeking acts than attractive influencers. The unattractive influencer may have had to work harder to get the same degree of compliance than the attractive influencer.

Of targets who complied, there were significantly different frequencies along three exchange dimensions. Unattractive targets gave relatively fewer total conversational acts. Possibly only an artifact of the fewer total number of conversational acts, there were fewer information-seeking and control-seeking acts from the unattractive target than from the attractive target.
Summary of Results

There was a significant shift in response to the critical item in the direction of influence. The attraction level of the influencer, as perceived by the target, was a significant factor in the degree of elicited compliance. Attractive influencers were more effective than unattractive influencers.

Using a criteria of two points or greater as successful compliance, there were 25 successful dyads and 15 unsuccessful dyads. A series of chi-square analyses on the frequency count of conversational acts indicate the following:

1) successful dyads made more conversational acts or responses than unsuccessful dyads;
2) successful dyads had the greater dyadic resource exchange level;
3) successful influencers talk more, but use fewer control-seeking responses than unsuccessful influencers;
4) unattractive influencers use more control-seeking responses than attractive influencers;
5) targets who did not comply used more control-seeking responses than targets who complied;
6) among targets who complied, attractive targets talked more, sought more information, and did more control seeking than the unattractive targets.
DISCUSSION -- STUDY II

The critical exchange hypothesis was supported; attractive influencers were relatively more effective than unattractive influencers in eliciting compliance from the target. Among targets who complied, 16 were unattractive and nine were attractive. The attraction level of the target, as perceived by the influencer, was not a significant factor in the influencer's effectiveness.

The exploratory aspect of this research has deliberately outweighed the hypothesis testing. The coding of conversational data into Longabaugh's Resource-Process framework allowed a breakdown of conversational variables. Tables 7, 8, and 9 summarize the chi-square analysis of the frequency of occurrence of specific conversational responses in different dyadic situations. These analyses were post hoc, and incomplete. Support exchange was of such relatively low frequency that analysis was not possible. The support modality is of particular interest to the exchange position and the flow and consequences of support seeking, giving, denying, and rejecting would have been theoretically useful. For future research on dyadic exchange, a less impersonal task and larger time interval of interaction might increase the subjects' use of support oriented responses. Examination
of the coding sheets reveals that the few support loaded responses tended to occur late in the interaction and were usually when the dyad had drifted from the primary task. These incidents looked as if they were tension reducing and often were bound up in verbal horse play. This may have been a necessary and useful part of the influence process. Might not a shrewd or efficient influencer be perceptive enough to know when to "back-off" or temporarily reduce tension level? A target who does not want to concede a point might well use any conversational technique to skirt the point.

The relative conversational patterns of attractive and unattractive influencers and targets in unsuccessful dyads could not be analyzed due to insufficient data. There were only 15 unsuccessful dyads and only 4 of them were with an unattractive target.

A number of potentially useful bits of information did stand out. The exchange hypothesis that the attractive influencer would be more efficient than the unattractive influencer was supported. The exchange assumption as to the dynamics of the phenomena would be that the fact the attractive influencer had been chosen by his target indicated that the target perceived some potential resources of value in their interaction relative to alternatives. The finding
that an attractive influencer used fewer control-seeking statements than an unattractive influencer was in line with the exchange rationale. Successful dyads had a higher rate of dyadic resource exchange than unsuccessful dyads. If the behavioral response of compliance is viewed as being exchanged for conversational units of value then one might say more salient conversational resources were exchanged in both directions in successful dyads. Fewer resources were exchanged in the unsuccessful dyads.

Enough bits of information were generated to predict a potentially successful influencer. First, he is perceived by his target as having something to offer. He talks more, controls the conversation by initiating topics and concepts. He exchanges resources readily both by giving and accepting what his target has to offer. He uses relatively few attempts to control his target; he saves his control attempts for critical elements and accepts control for non-critical elements. It is hypothesized that his acceptance of control in non-critical situations is a deliberate mechanism to gain credit and rely on reciprocity in issues critical to the desired influence. Carrying this to the extreme, you have the stereotype used car salesman who agrees with everything you say and builds you up by pointing out your fine taste and shrewd insight. When the dust settles, you are the proud
owner of 3,000 pounds of rusty iron. Obviously, the successful influencer must maintain the value of his resources; too much support, agreement, etc., would reduce the value of further interaction and reduce his effectiveness. Homans (1961) states that social reinforcements, like food pellets, lose value and effectiveness as they approach saturation.

The unattractive influencer was effective in nine dyads. The primary difference in the interaction of unattractive influencers was that they used more control-seeking behavior than their attractive counterparts. It might be hypothesized that the unattractive influencer has less to exchange or "buy" compliance with and uses a more direct attempt to control. Fewer unattractive influencers were effective, but nine out of twenty were.

Targets who did not comply made more control-seeking acts than targets who complied. Remember that unsuccessful dyads had higher oriented control-seeking behavior and a lower level of accepted resource exchange. In simple terms, targets who did not comply were the ones that argued, attempted to influence their partner in retaliation. It might be hypothesized that the best defense against an influencer's attempts is a counter attempt.

Among targets who complied, attractive targets talked more, did more information seeking and made more control-seeking attempts than unattractive targets. The targets who
were attractive to their partners were conversationally more aggressive.

**Future Research Possibilities**

Four important aspects of this research were:

1) the test of an exchange hypothesis within the non-controlled social interaction that the theory (or theories) was designed to handle; 2) the demonstration that R-P coding is a possible methodology for dealing with elementary social interaction; 3) a series of hypotheses generated by a chi-square analysis of the frequency of specific conversational variables by targets and influencers; this research demonstrates the possibility of analyzing specific patterns of conversation and their relation to influence and/or attraction. Hypotheses that evolved around the patterns of interaction as determiners of behavior would be true process hypotheses.

The use of R-P coding as a tool in elementary social research is relatively untried. The insights into possible dyadic dynamics and both attraction and influence attest to the coding system's potential for the exchange theorists. Some significant differentiations were found in the dyadic conversational patterns under varied situations. The attacking of particular hypotheses under controlled conditions is quite feasible. There are now two studies in progress and six planned studies that are aimed at using R-P coding to
predict which subjects would be effective influencers on the basis of conversational habits or techniques. It might be called the developing of a conversational scale for super salesmen. Many of the techniques for persuasion are being conceptualized by the exchange model and applied to conversational techniques.

The requirements of R-P coding are simple; only paper and pencil are needed. R-P coding might prove an excellent field measurement device. Exchange hypotheses could be tested in natural settings and without the necessary "staging" of laboratory experiments. Successful field research would expand the scope and confidence of exchange predictions.

Mission-oriented field research could be directed at education, industry, committee work, clinical interactions, etc. R-P coding offers a heuristic tool or scale that allows a hard look at the process of social interaction rather than only the consequences. Control can be applied by specifying specific styles of responses to specific acts. This involves the use of a highly trained confederate, but allows the generation and testing of specific hypotheses about the development and progress of an interaction.

R-P coding will reflect useful data about an interaction only to the extent that the relevant determiners of
the interaction are verbal and overt. The coding system cannot handle interactions that continue a significant degree of covert communication that is meaningful to the persons involved but not to the coder. This suggests that R-P coding will be most valid with stranger groups or developing relationships. Long-term or established relationships are probably more complex and would seem to present special methodological problems.

R-P coding is elaborate, time consuming and not methodologically neat. It should be remembered that social interaction is neither simple nor neat.
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Kiesler, C. A. Attraction to the group and conformity to group norms. *Journal of Personality*, 1963, 31, 559-677.


APPENDIX A

The Coding System [R-P]*

A. General Principles

The first part of this section of the coding operations manual, beginning with a brief overview, will deal primarily with a discussion of resources in the forms of material objects and behaviors. These will be briefly defined and differentiated in an effort to present a clear, simple baseline vocabulary and rationale for the consideration of the second part [Modes: Instigational-Modifiers and Response-Modifiers]; the third part [References] and ultimately for Part B, the specific coding operations, the grammar and syntax, so to speak.

The theoretical basis of the category system, as has been discussed above, rests on the construct of resource exchange as the oasis of interpersonal interaction; that is, interaction between people is conceptualized as the attempt to transmit the possession and/or use of resources from one person to another. Each such attempt is an act, and acts are coded according to their interpersonal context; that is, unless the act can be scored as having clear interpersonal meaning, it is irrelevant to the coding system utilized in
A resource is anything that is transferrable [actually or symbolically], that anyone values, and may be included in two general categories along separate dimensions: Material objects as resources, and behaviors as resources.

People use Modalities or behavior techniques for the transmitting of these resources, and each of the two constituent acts\(^1\) of any interest [instigation and response] has its own set of such modes. Instigational modes include seeking, promising, offering and attempting to take away. Response modes broadly include acceptance and reflection, implicitly or explicitly. If the initiator of a social act introduces a resource mode into an interpersonal situation, then his act is coded for its instigational component and is expressed in terms of one of the instigational modes. Once an instigation has occurred it must be scored as being responded to by the target. Every instigation must be coded for response, and conversely a response does not occur without an instigation.

\(^1\)An Act, whether an instigation or response, must occur in an interpersonal context with a real and present other person in order to be coded as an act. Thus, hallucinatory behavior on the part of an individual is excluded from this system of categories designed to describe and organize interpersonal interactions alone.
Resources can be transmitted instigationally or responsively with reference to various specific categories of people, places, objects, points in time, events, to other resources, or to the modes themselves. These categories or classes constitute the references of instigational content. Resources serve a dual function as both specific resources transmitted by instigational resource-modes, and as resource-references; that is a resource, [for example, information] may be offered with reference to another resource [for example, money]. While any resource can also be a resource-reference, there are some resource-references which may not serve in the capacity of specific resources, as will be delineated at a later time.

In summary of this brief over-view, an actor, or initiator of an interact, can attempt to transmit a resource [for example, information], by means of a mode of transmission [for example, offering], with regard to a specific reference or set of references [for instance, to the ward as an organizational entity and to some point in the past], with which the target, or potential respondent, can variously comply with or deny. The actor is thereby offering information about the ward sometime in the past, and the target responds [e.g., with compliance], and in so doing perhaps initiates an act himself by further attempting to transmit the same or
another resource.

*As described by R. Longabaugh in his coding manual, pp. 1-2.
APPENDIX B

Instructions:

On the following pages, you will find a series of situations that are likely to occur in everyday life. The central person in each situation is faced with a choice between two alternative courses of action, which we might call X and Y. Alternative X is more desirable and attractive than alternative Y, but the probability of attaining or achieving X is less than that of attaining or achieving Y.

For each situation on the following pages, you will be asked to indicate the minimum odds of success you would demand before recommending that the more attractive or desirable alternative X be chosen. Read the situations carefully and decide on one answer between you for each situation. Feel free to discuss the items but you must respond to every situation as a team, giving a single answer.

1. Mr. A, an electrical engineer, who is married and has one child, has been working for a large electronics corporation since graduating from college five years ago. He is assured of a lifetime job with a modest, though adequate, salary, and liberal pension benefits upon retirement. On the other hand, it is very unlikely that his salary will in-
crease much before he retires. While attending a convention, Mr. A is offered a job with a small, newly founded company which has a highly uncertain future. The new job would pay more to start and would offer the possibility of a share in the ownership if the company survived the competition of the larger firms.

Imagine that you are advising Mr. A. Listed below are several probabilities or odds of the new company's proving financially sound.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. A to take the new job.

____  The chances should be at least 1 in 10 that the company will prove financially sound.

____  The chances should be at least 3 in 10 that the company will prove financially sound.

____  The chances should be at least 5 in 10 that the company will prove financially sound.

____  The chances should be at least 7 in 10 that the company will prove financially sound.

____  The chances should be at least 9 in 10 that the company will prove financially sound.

____  Place a check here if you think Mr. A should not take the new job unless it is certain that the
2. Mrs. B, an only child, strongly desires children of her own. Her first attempt to give birth resulted in a serious miscarriage. She would very much like to have children but her physician has warned her that a second miscarriage could cause severe complications which might prove fatal.

Imagine that you are advising Mrs. B. Listed below are several probabilities or odds of a second birth proving successful.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mrs. B to attempt a second childbirth.

____ The chances should be at least 1 in 10 that the birth would be successful.

____ The chances should be at least 3 in 10 that the birth would be successful.

____ The chances should be at least 5 in 10 that the birth would be successful.

____ The chances should be at least 7 in 10 that the birth would be successful.

____ The chances should be at least 9 in 10 that the birth would be successful.

____ Place a check here if you feel that Mrs. B should
not attempt to give birth unless its success is assured.

3. Mr. C., a married 30-year-old research physicist, has been given a five-year appointment by a major university laboratory. As he contemplates the next five years, he realizes that he might work on a difficult, long-term problem which, if a solution could be found, would resolve basic scientific issues in the field and bring high scientific honors. If no solution were found, however, Mr. C would have little to show for his five years in the laboratory, and this would make it hard for him to get a good job afterwards. On the other hand, he could, as most of his professional associates are doing, work on a series of short-term problems where solutions would be easier to find, but where the problems are of lesser scientific importance.

Imagine that you are advising Mr. C. Listed below are several probabilities or odds that a solution would be found to the difficult, long-term problem that Mr. C has in mind.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. C to work on the more difficult long-term problem.

_____ The chances should be at least 1 in 10 that the long-
term solution would be found.

_____ The chances should be at least 3 in 10 that the long-term solution could be found.

_____ The chances should be at least 5 in 10 that the long-term solution could be found.

_____ The chances should be at least 7 in 10 that the long-term solution could be found.

_____ The chances should be at least 9 in 10 that the long-term solution could be found.

_____ Please check here if you feel Mr. C should not attempt the long-term research unless success is assured.

4. Mr. D, a college senior, has studied the piano since childhood. He has won amateur prizes and given small recitals, suggesting that Mr. D has considerable musical talent. As graduation approaches, Mr. D has the choice of going to medical school to become a physician, a profession which would bring certain prestige and financial rewards, or entering a conservatory of music for advanced training with a well-known pianist. Mr. D realized that even upon completion of his piano studies, which would take many more years and a lot of money, success as a concert pianist would not be assured.
Imagine that you are advising Mr. D. Listed below are several probabilities or odds that Mr. D would succeed as a concert pianist.

Please check the lowest probability that you would consider acceptable for Mr. D to continue with his musical training.

_____ The chances should be at least 1 in 10 that Mr. D would succeed as a concert pianist.

_____ The chances should be at least 3 in 10 that Mr. D would succeed as a concert pianist.

_____ The chances should be at least 5 in 10 that Mr. D would succeed as a concert pianist.

_____ The chances should be at least 7 in 10 that Mr. D would succeed as a concert pianist.

_____ The chances should be at least 9 in 10 that Mr. D would succeed as a concert pianist.

_____ Place a check here if you think Mr. D should not pursue his musical training unless he was certain to succeed as a concert pianist.

5. Mr. E, a forty-five-year-old dentist with two children in high school, is told by his physician that he has a plugged artery in his right arm. This condition is a continuing source of pain but it does not prevent him from
working and does not even reduce his skill. He has the choice of consenting to an operation which, if successful, would completely relieve the condition. However, if unsuccessful, it would leave the hand useless and the dentist would be unable to carry on with his work.

Imagine that you are advising Mr. E. Listed below are several probabilities or odds of this operation proving to be a success.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. E to consent to the operation.

___ Place a check here if you feel that Mr. E should not consent to the operation unless its success could be assured.

___ The chances should be at least 9 in 10 that the operation would be a success.

___ The chances should be at least 7 in 10 that the operation would be a success.

___ The chances should be at least 5 in 10 that the operation would be a success.

___ The chances should be at least 3 in 10 that the operation would be a success.

___ The chances should be at least 1 in 10 that the operation would be a success.
6. Mr. F has recently graduated from the University with a Liberal Arts degree. A firm from a distant city has offered him a high-paying job in his field of interest where, however, a steady stream of applicants would make his position tenuous. On the other hand, he could accept a low-paying commonplace job in his home town and help take care of his mother who has recently been the victim of a serious illness.

Imagine that you are advising Mr. F. Listed below are several probabilities or odds that the job would prove secure.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. F to accept the high-paying job.

____ The chances should be at least 1 in 10 that the new position would prove secure.

____ The chances should be at least 3 in 10 that the new position would prove secure.

____ The chances should be at least 5 in 10 that the new position would prove secure.

____ The chances should be at least 7 in 10 that the new position would prove secure.

____ The chances should be at least 9 in 10 that the new position would prove secure.

____ Place a check here if you think that Mr. F should
not accept the job no matter what the probabilities of success.

7. Mr. G is a married man with several children and a modest income. He is considering raising money on his life insurance to buy a stock which he feels should triple in value. On the other hand, the stock could prove worthless in which case Mr. G would go seriously into debt and have minimal insurance protection.

Imagine that you are advising Mr. G. Listed below are several probabilities or odds that the stock would increase in value.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. G to purchase the stock.

___ Place a check here if you think Mr. G should not purchase the stock unless he is certain that it would increase in value.

___ The chances should be at least 9 in 10 that the stock would increase in value.

___ The chances should be at least 7 in 10 that the stock would increase in value.

___ The chances should be at least 5 in 10 that the stock would increase in value.
8. Mr. H is the captain of College X's football team. College X is playing its traditional rival, College Y, in the final game of the season. The game is in its final seconds, and Mr. H's team, College X, is behind in the score. College X has time to run one more play. Mr. H, the captain, must decide whether it would be best to settle for a tie score with a play which would be almost certain to work or, on the other hand, should he try a more complicated and risky play which could bring victory if it succeeded, but defeat if not.

Imagine that you are advising Mr. H. Listed below are several probabilities or odds that the risky play would prove successful.

Please check the lowest probability that you would consider acceptable for the risky play to be attempted.

___ The chances should be at least 3 in 10 that the stock would increase in value.

___ The chances should be at least 1 in 10 that the stock would increase in value.

___ The chances should be at least 1 in 10 that the risky play will work.

___ The chances should be at least 3 in 10 that the risky play will work.

___ The chances should be at least 5 in 10 that the risky play will work.
play will work.

___ The chances should be at least 7 in 10 that the risky play will work.

___ The chances should be at least 9 in 10 that the risky play will work.

___ Place a check here if you feel that the risky play should not be attempted unless Mr. H was certain that it would work.
APPENDIX C

your letter

your partner's letter

1. Your partner was
   1 2 3 4 5
   bright average dull

2. Did you agree with your partner's discussions?
   1 2 3 4 5
   always sometimes never

3. Your partner viewed you as
   1 2 3 4 5
   bright average dull

4. Did your partner agree with your suggestions?
   1 2 3 4 5
   always sometimes never

5. In a similar situation would you be willing to have the same partner?
   1 2 3 4 5
   yes maybe no

6. Do you think your partner would be willing to work with you at a similar task?
   1 2 3 4 5
   yes maybe no
APPENDIX D

Sociogram - Set #4

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<th>Fourth</th>
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E & D - mutual unattractive

B & A - attractive/unattractive