Cooperation among individuals depends upon both the goal structure of the situation and the cooperative skills of the individuals. Since cooperation is probably the most important and basic form of human interaction, the skills of cooperation successfully are some of the most important skills a person needs to master. Cooperative skills include the skills of: (1) self-disclosing to and building trust with others; (2) communicating effectively with others; (3) influencing and supporting others; and (4) managing conflicts constructively. Basic to the establishment and stabilization of cooperation are the skills of communicating cooperative intentions and expectations and building trust. Effective communication depends upon both sending and receiving skills and the building of trust depends upon the skills of reciprocating a person's disclosure of information, ideas and feelings, and the communication of acceptance of his disclosures. [Not available in hard copy due to marginal legibility of original document.] (Author)
Interpersonal Skills For Cooperative Work*

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Introduction

There is probably no set of skills more important to a human being that the skills of cooperative interaction. The vast majority of human interaction is cooperative interaction. Without cooperation among individuals no group, family, organization, or school would be able to exist. Without high levels of cooperation there would be no coordination of behavior. No two individuals could communicate with each other or interact without cooperating to form a common language and agreed upon norms for behavior. Occupations, education, exchange of goods and services, or any other type of coordinated human action would not exist without cooperation. Even in fighting wars and conducting competitive activities there are vast underpinnings of cooperative agreements concerning how the competition or conflict will be conducted and what are the ways in which antagonists can express their hostility towards each other. Cooperation is the most important and most basic form of human interaction and the skills of cooperating successfully are some of the most important skills a person needs to master.

Definitions

There are two approaches to defining cooperation, one evolving from the intrinsic motivation viewpoint of Kurt Lewin (1935) which postulates that a state of tension within an individual motivates movement toward the accomplishment of desired goals, and the other evolving from the extrinsic motivation viewpoint of behavioral learning theory which postulates that individuals respond to reinforcing consequences in their external environment. These two approaches are not necessarily incompatible; while some extrinsic rewards, such as money, may reduce a person's intrinsic motivation to perform a task in the future, other extrinsic rewards, such as positive feedback, may increase a person's future intrinsic motivation (Deci, 1971).

Deutsch (1949a, 1962) defines a cooperative social situation as one where the goals of the separate individuals are so linked together that there is a positive correlation between their goal attainments; under purely cooperative conditions, an individual can obtain his goal if and only if the other person with whom he is linked can obtain their goals. Deutsch notes that from his definition of cooperation it follows that when any individual behaves in such a way as to increase his chances of goal attainment, he increases the chances that the other members with whom he is linked will also achieve their goals. He states that the psychological consequences of such a state of
affairs are:  
(1) substitutability---the actions of members in 
a cooperative relationship are interchangeable in the sense that 
if one member has engaged in a certain behavior there is no 
need for others within the relationship to repeat the behavior; 
(2) positive cathexis---if the actions of one member in a coopera-
tive relationship move the individuals towards their goal, his 
actions (and he as a person) will be favorably evaluated by the 
others; and (3) inducibility---if the actions of a person in a 
cooperative relationship move the others toward their goal, the 
others will be receptive to his attempts to induce them to 
engage in behavior that will facilitate his actions. For 
Deutsch it is the drive for goal accomplishment which motivates 
cooperative behavior.

Kelley and Thibaut (1969) define a cooperative structure 
as one where the individual's rewards are directly proportional 
to the quality of the group work. From their point of view it 
is the reward distribution that motivates individuals to behave 
cooperatively.

Even if a situation is structured cooperatively, a person 
must make a decision to engage in cooperative behavior. 
Following the theorizing of Scheff (1967) and Boyle and Bonacick 
(1970), it may be assumed that the decision to engage in coopera-
tive behavior is based upon (1) the expected probability of goal
attainment resulting from cooperative behavior, (2) the size of the perceived risk that someone will exploit one's cooperative behavior, resulting in a decreased probability of goal attainment, and (3) the temptation to exploit the other persons' cooperative behavior for one's own benefit. The smaller the gain and the larger the risk and temptation the lower will be the motivation to engage in cooperative behavior. Each person must assess the gain, risk, and temptation factors in the situation and anticipate how the other individuals are assessing the same factors. Once the decision is made, stable cooperation depends upon (1) mutual intentions to behave cooperatively and mutual expectations that the other individuals in the situation will also behave cooperatively, (2) effective communication of these expectations and intentions, and (3) trust that the other individuals will behave cooperatively and will not exploit one's cooperative behavior.

There has been a great deal of research concerning the outcomes of cooperative situations compared to competitive and individualistic situations. That research will not be discussed in this paper, but interested readers are referred to a recent review by Johnson and Johnson (1973).
Interpersonal Skills Necessary For Cooperative Interaction

Before cooperative skills are discussed the author wishes to make a basic point. The author's stance is that the only reason for engaging in theorizing and research is to affect the way in which persons interact. At some point theories and research findings must be translated into interpersonal behavior and in making recommendations concerning interpersonal behavior the social scientist should utilize existing empirical knowledge. This paper is an attempt to take the empirically validated theory in the area of cooperation and translate it into a statement concerning the interpersonal skills necessary to initiate and maintain stable cooperative interaction.

Even if situations are clearly structured cooperatively and the persons involved make a decision to engage in cooperative behavior, they must have the skills necessary to interact cooperatively with others. The interpersonal skills necessary for cooperative interaction do not appear magically in individuals as a result of the situational structure; they have to be learned. Cooperative skills are learned the way any skill is learned; the nature and effectiveness of the behavior is demonstrated through modeling, the person is reinforced for engaging in the behavior; and the norms of the person's reference group must support the behavior. As part of learning cooperative skills the person must be interpersonally effective. Interpersonal effectiveness may be defined as the extent to which the consequences of a person's behavior match his intentions (Johnson, 1972a). When a person interacts with other
individuals he has no choice but to make some impact upon them; sometimes he makes the impact he wants but other times he may find that others perceive and respond to his behavior differently than he intended. All cooperative skills depend upon the person’s ability to have the impact upon others he intends.

In order to interact cooperatively with others, a person has to have skills in the following areas (Johnson, 1972a): (1) self-disclosing to and building trust with others, (2) communicating effectively with others, (3) influencing and supporting others, and (4) managing conflicts constructively with others. The specific interpersonal skills focused upon in this paper, however, are the skills involved in communication and trust.

Communication Skills

A major difficulty in discussing communication skills is that there are a multitude of definitions for the concept of communication and little agreement about which definition is most useful. Dance (1970), for example, did a content analysis of 95 definitions of communication which he found published in several diverse fields; he derived 15 distinct conceptual components of communication. He notes that the variety of definitions has led different theorists and researchers in different and sometimes contradictory directions and concludes that the concept of communication is overburdened and a family
of concepts which could replace it needs to be created.

In summarizing several of the definitions of communication, Johnson (1972a, 1973a) states that because (if there is perceptual engagement) we continuously affect one another (altering perceptions, dispositions, and expectations), interpersonal communication can be defined very broadly as any behavior, verbal or nonverbal, that is perceived by another person. Interpersonal communication, however, is more commonly defined as a person sending a message to a recipient(s) with a conscious intent to affect the latter's behavior. Effective communication can then be defined as existing between two persons when the receiver interprets the sender's message in the same way the sender intended it. This definition of communication does not mean there is always a temporal sequence of events whereby a person thinks up a message, sends it, and someone else receives it. Communication among individuals is a process in which everyone receives, sends, interprets, and infers all simultaneously and there is no beginning or end. It should be added that all communication involves the transmission among individuals of symbols to which certain meanings are attached. These symbols can be either verbal or nonverbal. The exchange of ideas and experiences among individuals is possible only when both have adopted the same conventions for relating a particular graphic, nonverbal, or spoken symbol to a particular conceptual experience.
While there is considerable research on various aspects of interpersonal communication, the conceptual confusion in the field makes it difficult to directly link much of the research with specific communication skills. Most applied approaches to interpersonal communication, however, emphasize sending and receiving skills. A similar approach will be taken in this paper. There is empirical support that skill in sending messages so that they are accurately understood consists of (Johnson, 1972a, 1973a, 1973b):

1. Increasing the serial and simultaneous redundancy of the message by using more than one channel of communication and repeating the message more than once.

2. Making the message complete and specific, including clear statements of all necessary information concerning the referent of the message and the intention behind the message.

3. Clearly "owning" your message by using personal pronouns such as "I" and "my"; this includes clearly taking responsibility for the ideas and feelings one expresses.

4. Ensuring that the verbal and nonverbal messages all communicate the same message.

5. Asking for feedback concerning the reception of the content of the message and the inferred intentions behind the message.
Being skilled in sending messages is only half of effective communication; one must also have receiving skills. The skills involved in receiving messages deal with providing feedback concerning the reception of the message. In providing feedback a person communicates his understanding of the message and his intention of wanting to correctly understand the other's messages. A variety of studies have demonstrated the importance of communicating the intent to correctly understand, not evaluate, a person's messages, (see Rogers, 1965 and reviews by Strupp & Bergin, 1969, Traux & Carkhuff, 1967).

The basic skill involved in receiving messages is paraphrasing accurately the content and feelings of the message in a nonevaluative way (Johnson, 1972a). All the research conducted on Rogerian counseling is relevant in validating the effectiveness of this skill, although most of the research is correlational and has little validity due to questionable methodology. The strongest evidence concerning the effects of this skill come from a series of experimental studies conducted by Johnson (1971a). The results of his studies indicate that accurate paraphrasing (compared with inaccurate or incomplete paraphrasing) induces cooperative behavior between negotiators (Johnson, 1966, 1967, 1971b), clarifies misunderstandings concerning negotiators' positions (Johnson, 1966, 1967, 1968), increases understanding of the other's position (Johnson, 1966, 1967, 1968, 1971c), increases one's ability to perceive
the issue from the other's frame of reference (Johnson, 1972b),
results in a reevaluation of the issue and a change of attitude
concerning the issue (Johnson, 1966, 1967, 1971c), and results
in the person engaging in accurate paraphrasing being perceived
as attempting to understand the other's position, as an under-
standing person, as willing to compromise, as cooperative,
and as trustworthy (Johnson, 1966, 1967, 1971b). Thus there is
considerable evidence that accurately paraphrasing the content
and feelings of a message in a nonevaluative way facilitates
communication and the development of cooperative interaction
among individuals.

Skill in accurately paraphrasing the content and feelings
of another person's message is undoubtedly related to the
psychological ability to take the role of the other in the
situation, for it results from (and facilitates) being able to
correctly infer the other's intentions and the other's frame
of reference. Kest (19;1) notes that the ability to form
hypotheses concerning what is in another person's mind is
basic to establishing cooperative interaction and is a basic
cognitive ability necessary to develop moral judgment. Flavell
(1971) concluded from the research on the development of the
ability to make inferences about others that being able to
take into account the perspective of others in thinking about
an issue is an important and basic part of social-cognitive
growth. Thus training in receiving skills such as paraphrasing
becomes part of providing training for the general social cognitive development necessary for cooperative interaction.

Specific exercises and instructional experiences for skill development in communication skills can be found in Johnson (1972a).

Trust

Trust is a necessary condition for stable cooperation and effective communication. The higher the trust the more stable the cooperation and the more effective the communication. Several behavioral scientists have stressed the importance of trust for cooperative interaction. Deutsch (1962) states that all cooperation rests upon the ability of individuals to trust one another and that the initiation of cooperation requires trust whenever the individual, by his choice to cooperate, places his fate partly in the hands of others. Gibb (1964) concluded from a series of research studies that trust is a precondition for the flow of feelings, formation of goals, and the implementation of influence mechanisms within work groups. Rogers (1951, 1961), Gibb (1964), and Blocher (1966) have all stressed the importance of trust in helping relationships. Friedlander (1970) conducted a study of industrial decision making groups, focusing upon members' perceptions of trust vs. competitiveness within each group. He found that group trust was the best predictor in his study of eventual group accomplishment. Workgroups in which members had high trust in one another
prior to a training program reached greater degrees of group effectiveness and had more worthwhile meetings after the training program was completed; conversely, groups in which members felt competitive with one another prior to the program were less effective and had less worthwhile meetings after the training. Walton and McKersie (1965) state on the basis of their review of the literature that trust is a precondition for effective interpersonal and group problem solving. Deutsch is the only one of the above individuals, however, who directly dealt with the concept of trust or who presented a clear conceptualization of trust.

Deutsch (1957, 1958, 1960, 1962) conducted a series of studies on the development and maintenance of trust which indicate that trust is developed and maintained the more effective and complete the communication, the more the individuals believe that the others have nothing to gain from untrustworthy behavior, the more they perceive that they are able to exert some control over the other's outcomes, the more the other's cooperative behavior is perceived as being conditional upon the existence of mutual trustworthiness, and the more they have experienced benevolent rather than malevolent treatment from the others in the past (a finding corroborated by Schlenker, Helm, and Tedeschi, 1973). Deutsch found that trust, while often very difficult and time-consuming to build, is very easily and quickly destroyed by exploitative behavior. Similarly, Kelley and Stahelski (1970) demonstrated that a person who
begin to behave competitively in a cooperative group can quickly destroy all trust and force the other members into equally competitively behavior. The situational variables Deutsch found to affect trust were:

1. The opportunity for each person to know what the other person will do before he commits himself irreversibly to a trusting choice;

2. The opportunity and ability to communicate fully a system for cooperation which defines expectations, intentions, mutual responsibilities, and also specifies a procedure for handling violations and returning to a state of equilibrium with minimum disadvantage if a violation occurs;

3. The power to influence the other person's outcome and hence to reduce any incentive he may have to engage in untrustworthy behavior.

Garfinkel (1963) notes that individuals routinely engage in trusting behavior without full consciousness of the risks involved; it is only when their trust has been violated that they fully realize their vulnerability and the risks they have taken. Driving down a highway, for example, is routine behavior for most people and the underlying trust in others to obey the traffic rules is often not consciously thought of until someone begins driving on the wrong side or in an erratic manner.
Deutsch (1962) in a prior discussion of this point noted that the only alternative available for individuals who are willing to adhere to the rules and normative expectations for behavior when they are confronted with someone who violates the rules is to attempt to develop the conditions under which mutual adherence to the rules will occur.

Trust and communication are interdependent in the sense that trust cannot be developed without communication and communication is affected by the level of trust existing among individuals. Several studies have indicated that communication will not be as effective under low trust conditions as it is under high trust conditions (Mellinger, 1956; Deutsch, 1957, 1962; Deutsch & Krauss, 1962; Krauss & Deutsch, 1966). In a recent study Schlenker, Helm, and Tedeschi (1973) found that in communicating with highly trustworthy individuals subjects more frequently and more truthfully announced their cooperative intentions and rarely used evasive replies. Previous studies (Gahagan & Tedeschi, 1968; Schlenker, Helm, Nacci, & Tedeschi, 1972) similarly found trends that indicated that a person's trustworthy behavior prompts subjects to reciprocate by announcing their own cooperative intentions. Schlenker, Helm, and Tedeschi (1973) also found that the subjects responded to untrustworthy persons with evasive communications, dishonesty in their communications, and noncooperation.

In all the writings on trust there are many elements
emphasized. Initial expectancies, predictability of behavior, consistency of behavior, vulnerability, risk, confidence in the other's intentions and motives, rules and other normative expectations, and receiving information from another person, all are discussed as being part of "trust". The most complete conceptualization of trust, however, was made by Deutsch (1957, 1962). From his and the writings of others trust may be defined as including the following elements:

1. The person is in a situation where a choice to trust another person can lead to either beneficial or harmful consequences for his needs and goals. There is some realization that there is a risk involved in trusting.

2. You realize that whether the beneficial consequences or the harmful consequences take place depends upon the future behavior of another person.

3. You expect to suffer more if the harmful consequences resulted than you will gain if the beneficial consequences resulted.

4. You feel relatively confident that the other person will behave in such a way that the beneficial consequences will result.

Thus the mother who leaves her child with a babysitter makes a trusting choice because the mother presumably: (1) is aware that her choice could lead to harmful or beneficial con-
sequences, (2) realize that the consequences of her choice depend upon the behavior of the babysitter, (3) would expect to suffer much more if her trust in the babysitter were violated (and her child is harmed) than she would gain if her trust were fulfilled (she is free to go shopping), and (4) feels relatively confident that the babysitter will behave in such a way that the beneficial consequences will result.

One of the criticisms which can be made of Deutsch's (and everyone else's) conceptual option of trust is that it is difficult to operationalize in an applied situation. Until recently, there has been little attempt to relate conceptualizations of trust to specific interpersonal skills (Johnson, 1972a; Johnson & Noonan, 1972). Since the disclosure of ideas and feelings relevant to the accomplishment of cooperative goals is essential to cooperative interaction and the building of trust (Argyris, 1965) and since any fears of rejection or expectation must be minimized (Johnson, 1972a), the skills relevant to the development and maintenance of trust are (1) self-disclosure skills and (2) the skills involved in communicating acceptance.

The above definition of trust suggests that the conditions under which a choice to disclose the ideas and feelings relevant to accomplishing cooperative goals will result in increased trust are:

1. awareness that the choice to disclose could lead to
facilitation of goal accomplishment or to the harmful consequences of either exploitation by a more competitively oriented person or rejection and ridicule;

2. the realization that the consequences of the choice depend upon the behavior of the other person;

3. expectations that one will suffer more if one's trust is violated (and one's disclosures are exploited or rejected) than one would gain if one's trust is fulfilled (and goal accomplishment is facilitated); and

4. a relatively confident feeling that the other will behave in such a way that the beneficial consequences will result.

In a trusting situation the person behaving cooperatively is dependent upon the others not to take advantage of his vulnerability. Vulnerability exists when a person has taken a risk that exposes him to harmful consequences, such as exploitation or rejection. Because of the cooperator's vulnerability, the others in the situation temporarily have power over his feelings and future gains. Trust is build when the others do not exploit the cooperator's vulnerability or reject and ridicule his cooperative behavior; trust is destroyed when the others use their power to harm the cooperator.

The steps in building trust are for (1) a person to take risk with disclosing his information, ideas, or feelings, (2) the other persons in the situation to respond with acceptance, and/or (3) the other persons in the situation to reciprocate
the disclosures. By definition trust begins when an individual takes a risk by disclosing his information, ideas, or feelings about the cooperative task, the accomplishment of the cooperative goal, or the way in which the individuals are working together. The next step is for the other individuals in the situation to respond with acceptance. Acceptance is the key to reducing anxiety and fears about vulnerability. Defensive feelings of fear and distrust are one of the common blocks to cooperative interaction and the development of trust (Rogers, 1951; 1965); if the person risking disclosure does not feel accepted, in the future he will not trust the others and will not engage in further disclosures. Rogers (1951) has repeatedly suggested that a person's acceptance by others is an essential ingredient of successful personal problem solving. Studies by Olson (1963) and Taylor, Altmar, and Sorrentine (1965) indicate that positive accepting reactions do increase the frequency and depth of disclosures. Johnson and Eccom (1971) conducted a study in which acceptance of disclosures was contrasted with rejection of disclosures; they found a much higher level of trust and perceptions of similarity being developed and maintained in the accepting condition. On the basis of these studies it may be concluded that a person will trust others more when the others respond to the person's disclosures with acceptance.

The reciprocation of disclosures is the third step in
building and maintaining trust in a cooperative situation. This involves the syndetic response of disclosing one's information, ideas, and feelings in a way which builds or elaborates upon the previous speaker's disclosures, recognizes their validity, or in some way uses them to generate further progress towards the accomplishment of the cooperative goal. Social penetration theory (Altman & Taylor, in press; Taylor, 1968) and social exchange theory (Homans, 1961; Thibaut & Kelley, 1959) suggest that reciprocity is rewarding. Several studies have manipulated level of disclosure; results indicate that highly disclosing confederates elicit greater subject disclosure than do low disclosing confederates (Taylor, 1964; Chittick & Himelstein, 1967; Murdoch, Chenowith, & Riseman, 1969). Worthy, Gary, and Kahn (1969) found that as a person increased the intimacy of his disclosures the other individuals in the situation responded with increasingly intimate disclosures. The interviewer who discloses elicits greater disclosures from respondents and is rated as more trustworthy (Drag, 1968) and more positively in general (Jourard & Friedman, 1970) than the interviewer who does not disclose. Johnson and Noonan (1972) conducted a study in which a trained confederate either reciprocated or did not reciprocate a subject's disclosures; they found that the subjects trusted and liked the confederates in the reciprocation condition much more than did the subjects in the nonreciprocation condition. On the basis of these studies
it may be concluded that a person will trust other individuals more when they reciprocate (in a syndetic manner) the person's disclosures.

Building and maintaining trust, therefore, depends upon the skills involved in disclosing information, ideas, and feelings and in expressing acceptance. Most individuals receive a great deal of training concerning how to organize information and ideas so that they can be communicated effectively. Johnson (1972a) notes that more personal disclosures of feelings and observations depend upon an individual's self-awareness and self-acceptance and he presents a series of exercises to increase a person's self-awareness, self-acceptance, and disclosure skills. The communication of feelings is a neglected area in most educational programs; Johnson (1972a) states that the effective communication of feelings depends upon the skills of verbally describing the feelings clearly and accurately and of making one's nonverbal messages congruent with such verbal descriptions. He presents a training program for developing skills in expressing feelings. On the basis of Johnson's (1971b) that trust is increased in a negotiating situation as a person is warm, engages in accurately paraphrasing of the other's position and feelings, and proposes compromises, Johnson (1972a) and Johnson and Noonan (1972) operationalized the expression of acceptance as the expression of warmth towards and interest in a person's dis-
closures. The communication of interest involves the receiving skills previously discussed (i.e., accurate paraphrasing); the expression of warmth involves nonverbal communication skills of coordinating a smiling facial expression, a warm tone of voice, direct eye contact, and other nonverbal cues. Training exercises for these skills are found in Johnson (1972a).

Summary

Cooperation among individuals depends upon both the goal structure of the situation and the cooperative skills of the individuals. Since cooperation is probably the most important and basic form of human interaction, the skills of cooperating successfully are some of the most important skills a person needs to master. Cooperative skills include the skills of (1) self-disclosing to and building trust with others, (2) communicating effectively with others, (3) influencing and supporting others, and (4) managing conflicts constructively. Basic to the establishment and stabilization of cooperation are the skills of communicating cooperative intentions and expectations and building trust. Effective communication depends upon both sending and receiving skills and the building of trust depends upon the skills of reciprocating a person's disclosure of information, ideas, and feelings, and the communication of acceptance of his disclosures.
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