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INTERPERSONAL FEEDBACK : THE
TRANSACTION FOR MUTUALITY

by
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ABSTRACT (within 250 words).

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Udai Pareek

ABSTRACT

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Interpersonal Feedback : The Transaction for Mutuality

Udai Pareek

The Concept of Feedback :

The concept of feedback has been taken from mechanics. In a machine the arrangement of an automatic signal of the degree of performance or nonperformance is called feedback. This concept was then introduced in cybernetics. Amongst behavioural science the concept of feedback has been used for a long time in experimental psychology. Feedback has been used to indicate the sensory report of the somatic result of a behaviour. For example, the visual or kinaesthetic reports on movement.

The term feedback is being increasingly used in the interpersonal context. In social psychology the term would mean " a direct perceptual report of the result of one's behaviour upon other persons" (English and English, 1958). Kurt Lewin popularised this term out of his concern for providing valid data on change in behaviour - food habits, supervisory behaviour, social practices, etc. Feedback is "the process of providing valid data" (Schein and Bennis, 1965). Schein and Bennis (1965) point out " an important flaw in our society, namely, the lack of adequate and trustworthy mechanisms of feedback built into our social institutions. Bosses cannot talk or level with employees, wives with husbands, children with parents, students with teachers, and so forth. A number of pathetic symptoms of this communication gap can be seen in our contemporary society: intergroup strife of all kinds, divorce rates, the ubiquity of emotional problems, and what political scientists call 'pluralistic ignorance,' a malignancy born out of the absence of information about what others think — or a distorted version of this information — leading to absurd action or impotent despair."

Using the cybernetics analogy, Golombiewski (1972) defines feedback as "information concerning the efficacy of the data processor's adaptations to his environment." He has discussed feedback both as an input and as a throughput. He has considered feedback and disclosure as vitally related to each other, the former relating to the information (both verbal and non-verbal) people give each other, and the latter relating to sharing something about oneself with the other.

The Functions of Feedback

How does feedback help a person? The primary role of feedback is to provide data to the person for processing. It helps in increasing his **sensitivity**, in both looking for data and processing the data for increasing one's effectiveness in future. Das and Bower (1974) have reported results of a study giving some physiological evidence of feedback causing internal reflection. Anticipatory heart rate acceleration while waiting for feedback is interpreted as a sign of internal reflection, and the post-feedback deceleration as that of attention to external events.

Feedback also helps in building an integrated concept of self. Kanfer, Karoly and Newman (1974) have reported results of an experiment in which the best recall and the greatest influence on preference of slides of faces was found in the "self group", one which got the feedback of scores allegedly reflecting their own emotional reaction to the slides. In the second experiment also both the source of feedback and magnitude of discrepancy of data from self-ranking were found to be significant influence on recall. The tendency to reinforce one's own preferences and attitudes is a sign of development of an integrated self.

Horwitz (1964) has pointed out three main advantages of feedback compared to psychotherapy. In the first place feedback covers much broader range of behaviour, and is not confined to "group focal conflicts"; secondly, it utilises the social pressure and the group resources; and in the third place, the emphasis on direct verifiable information in feedback helps to avoid the regression the therapist tends to induce for getting the unconscious conflicts at the surface.

Golembiewski (1972) suggests six properties of helpful feedback: it enhances mutual interpersonal competence, facilitates autonomy, seeks a special level, relies on a contingent process, does not destroy defenses, and is most effective in group situations.

Feedback enhances mutual interpersonal competence. Interpersonal competence is defined as "the ability to cope effectively with interpersonal relationship" (Argyris, 1968). Argyris suggests three criteria of effective interpersonal coping: accurate perception of interpersonal situation, more or less permanent solution of the problems and the solution contributing to the working together of both persons involved.

Helping a person to know what effects his behaviour has produced, contributes to the development of his interpersonal competence. Argyris (1968) has discussed the conditions for increasing interpersonal competence through feedback -- through what he calls "competence-oriented feedback", which he defines as "information that is (a) minimally distorted, (b) directly verifiable, (c) minimally evaluative." Contrasted with this is what he calls "survival-oriented feedback: "information that is (a) interpretive and based on inferred categories, (b) evaluative, and (c) contributory to insight with psychological failure."

Interpersonal feedback is an important input for self-awareness. Johari Window (Luft, 1963) is one useful and simple model of self-awareness. As shown in Figure 1, using two dimensions of known-to-self and known-to-others, a person's self-awareness can be divided into four parts. "Public area" is that part of the self about which both the individual and others know: his name, profession, known aspects of his style, etc." "Hidden area" is that part of the self which the person keeps secret from others. "Blind area" consists of behaviour of which the individual may not be aware, but which others know. For example, mannerisms, nonverbal cues given by the individual without being aware of them and his strengths of which he may not know would fall in this area. "Unknown area" is that part of the self about which little is known either to the person himself or to others: talents that may suddenly be shown in future, complexes etc.

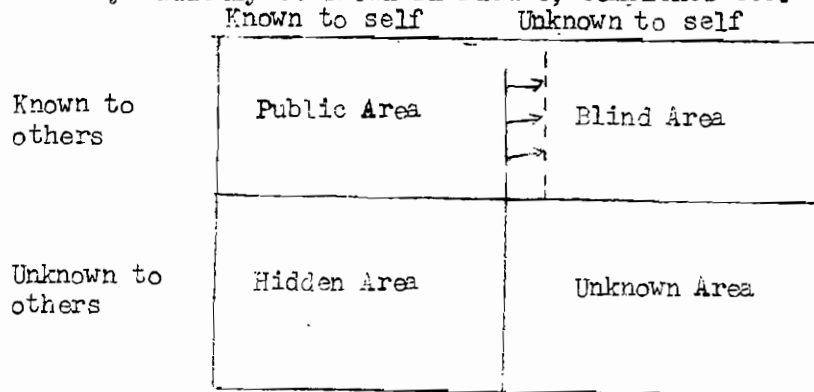


Figure 1

The Function of Feedback in Johari Window

The role of feedback is to increase the "public area" of the self by reducing the "blind area." If the "blind area" in a person is large, his 'control' over himself -- using his strengths effectively and overcoming his limitations -- would be low. Feedback may help him become aware both of his strengths, and his weaknesses, and may give him an opportunity to manage them more effectively, thus increasing his interpersonal effectiveness.

Golembiewski (1972) has suggested a function of feedback, that it facilitates autonomy. Feedback increases the opportunity for a person to use the information he may get through feedback for taking decisions about changing his behaviour. Helpful feedback does not tell a person what he should do, but raises questions to him so that he may be able to take decisions himself. Continuous use of such feedback may help a person exercise autonomy.

One of the functions of feedback is to help individual use several sources for collecting data about his behaviour. Instead of relying on a single source, an individual takes initiative in requesting other sources to provide data about the effect of his behaviour on them. Feedback received from multiple sources may help the individual not only to check accuracy of his own judgement and perceptions, but also the accuracy of the feedback he is receiving from a particular source. This function is very useful to help a person become more sensitive so that he begins to pick up cues which he might have ordinarily missed.

Feedback facilitates interpersonal communication by increasing understanding between two individuals who are involved in the act of feedback. The most important contribution of interpersonal feedback is to the development of mutuality between two individuals. The more trusting relationship is developed as a result of feedback, the better the communication will be between two persons.

Mutuality is "a circular interactive process coordinating the needs of participants to the benefit of all involved" (Dedmon, 1973). It is built through the establishment of trust. Experience and research on feedback in Laboratory training situation have shown that feedback contributes to the development of trust (see Stoller, 1969). Unless trust develops between two individuals the feedback given by one to the other cannot be helpful.

Although feedback has been reported to be very effective in changing an individual's behaviour, a few studies indicate that, for the most part, a superintendent's perceived behaviour did not change following feedback. Certainly an "automatic" effect of verbal feedback cannot be assumed, as Hermann and Stapf (1973) say, several factors contribute to the effectivity of feedback.

The person receiving feedback, and his need for feedback, is an important factor. A learner may need more feedback, and there may be less need for operational feedback with increased learning (e.g. Wirstad, J; Creutzer, P. and Gyllensten, B. 1970). The person giving feedback, his needs, personality, and his communication style are also important. We shall refer several such factors while discussing the feedback process in a later section.

Application and Uses of Feedback

Feedback has been very widely used in motor learning (e.g. some recent studies indicate Johnson and Leibowitz, 1974; Norman, 1974; Payne and Dunman, 1974; Payne and Richardson, 1972; Rogers, 1974). We shall discuss the role of feedback in motor learning.

Feedback has been used, and found useful, in several areas. Roll (1973) has reported the effectiveness of feedback in correcting speech defects. He found that removal or reinstatement of feedback resulted in a rapid increase and decrease respectively in the percentage of nasalised responses. Feedback has been reported to facilitate transfer of learning (Siegler, 1973). Subjects in the experimental group learned a strategy as a result of feedback. Similar results for transfer of learning have been reported by Zimmerman and Rosenthal (1974). Knowledge of results (KR) as one kind of feedback has been found to be useful in improving performance (e.g. Schmidt and Wrisberg, 1973). The use of feedback eliminates commitment of errors (Sen and Ganapathi, 1973). Titus (1973) found useful in recognition performance. According to the findings of Peterson and Furley (1974) 100% feedback "resultant achievement motivation" (RAM) was significantly positively related to the rate of learning. This shows that under complete feedback condition the achievement motivation is able to contribute to learning. Feedback has been reported to contribute to error detection and error reduction (Adams and Goetz, 1973). Stenalech (1973) has reported results of a research to support the view that a memory trace is imprinted with feedback from all modalities and that the amount of such feedback determines memory trace strength.

All these are individual gain. Feedback also contributes to the increase in group cohesiveness (Bourman and Siegel, 1973). Feedback has been found to benefit all levels of persons, and no class differences were found on the benefit from feedback (Turner, Hall and Grimmett, 1973). However, in one experiment those who had initial low scores on achievement tended to gain the most from feedback (Tait, Hartley and Anderson, 1973).

A large number of researches have been done on biofeedback. The feedback of the physiological functions of a person to him have been found to help him control even autonomic functions. Blanchard and Young (1974), reviewing the literature report that the efficacy of biofeedback has been established for muscle retraining, elimination of subvocal speech while reading, and elimination of tension headaches. In the areas of elimination of cardiac arrhythmias, lower blood pressure, and reducing seizure frequency the results are encouraging. Lynch (1973) has posed the problems of biofeedback in relation to conditioned reflex theory. Effectiveness of biofeedback training for behaviour modification may depend on several factors. It has been suggested (Budzynski, 1973) that biofeedback training could constitute a preventive technique to enable individuals to cope with the stress of a "future shock" environment. Schwartz (1973) suggests a combined behavioural-biological model emphasizing (a) the natural relations between responses, (b) the exact manner in which the feedback and reward is given; and (c) biological, cognitive, and environmental constraints as a potential means of predicting whether biofeedback training will be clinically significant for a given patient.

Swartz and Shapiro (1973) emphasize problems of expectancy and motivation, personality and life-style, and biologic constraints, and conclude that biofeedback techniques should be viewed as only one part of a combined behavioural treatment programme for hypertensive patients.

Programmed instruction uses feedback quite effectively. However, this feedback is not interpersonal in nature. Feedback is provided by the system. A more sophisticated mechanical feedback device is that of videotape. A person's behaviour is videotaped and the videotape can be played back to the individual for a specific purpose. Videotape feedback has been effectively used with psychiatric patients (Anderson and Sainato, 1973). It has been reported to influence self-ratings (Griffiths and Hinkson, 1973). Findings of Muzokari, Weimann and Kreiger (1973) indicate that the manner in which videotape feedback is presented is a crucial determinant in its effectiveness. However, Alkire and Brunso (1974) warn about the danger of use of such

a powerful technique, especially in interdependent dyads like a couple, without proper care and evaluation. Videotape feedback has also been used with teachers. Erwin and Cannon (1973) discuss the use of tape-recorded staff conference as a method for providing feedback to school personnel. Rutherford (1973) reports the effectiveness of a combination of a model and feedback tape intervention being effective in changing teaching behaviour. Self-confrontation through such feedback has been used for microteaching and has been found to be useful for self-control and self-direction (Bierschenk, 1974). Archer and Kagan (1973) compared interpersonal communication skills training groups led by undergraduate paraprofessional leaders using an interpersonal process-recall videotape-feedback model with groups using a limited structure encounter group model and no treatment control groups. Sixteen leaders were used in each type of training group. Participants in the videotape feedback groups scored significantly higher than did the encounter or control groups.

Feedback has been effectively used for the training of school psychologists (Conti and Bardon, 1974), counselors to improve their performance (Sell, 1974), empathic responses (Carlson, 1974) and group skills (Jacobs, Brown and Randolph, 1974). The feedback model suggested by Jacobs et al (1974) includes student practice in group leadership and feedback, student participation in a growth group, observations of instructor-led growth groups (modeling), and instruction.

Feedback has been widely used in various kinds of therapy. This ranges from physical therapy to psychotherapy. For example, Duncan (1974) reports results of a very effective application of feedback to modification of walking posture. Feedback has been applied to the treatment of depression (McLean, Ogston and Grauer, 1973), treatment of sexual dysfunction (Sorber, 1974) and family therapy (Barry, 1972). Barry (1972) has used systems approach in explaining the role of feedback, emphasizing the interaction between family, society, and the individual with reference to the feedback that occurs within this complex network of social systems. In feedback, part of the systems output is reintroduced into the system as information about the output. To understand the functioning of a particular family, the nature of the system and its feedback mechanisms must be considered as well as the nature of the input. Viewing the family as a subsystem of partial substructure of the larger system of the community and as the fundamental unit of the suprasystem, the society, Barry discusses the role of the nurse in elucidating and effecting change within this system. Feeney (1973) proposes that 3 functions are required in a successful treatment programme: task accomplishment, growth, and adaptation. Discussing the information gathering activities appropriate to each, it is suggested

that task accomplishment and growth are facilitated by direct operational feedback. Guidelines are needed which would indicate aspects of the treatment setting to be investigated and the most appropriate data collection methods to use. Feeney (1973) concludes that despite the lack of comprehensive guidelines concerning the use of feedback in administering programmes, administrators of residential programmes should begin to make planned use of feedback.

An interesting design in the use of feedback has been reported by Christensen and Arkowitz (1974), in dealing with problems of dating.

An experiment was done with 14 male and 14 female undergraduates who volunteered for a programme to increase their dating effectiveness for 6 dates, each date with a different opposite-sex member. Matching was done on the person-specified constraints of age, height, race, and distance from campus. After each date, subjects exchanged feedback forms via the investigator. Feedback forms called for 4 positive aspects of the other and 1 behaviour that the other should change. Heterosexual interaction frequency and subjective measures of comfort increased significantly with treatment. The experiment shows that effectiveness may increase in situations of mutual feedback.

Feedback has been one of the anchor posts of laboratory training. One of the main values of laboratory training is to develop norms of effective and helpful feedback (Schein and Bennis, 1965). Shepard (1964) describes what he calls "the triangulation procedure" for improving the usefulness of personal feedback. He uses the term to signify the notion that views from at least two positions are needed to locate a point in space. Shepard suggests three phases in the "triangulation procedure" in a T Group: members become familiar with one another's behavioural patterns and patterns of explanation; each member discusses his significant relations with and experience in the past groups, the present relations and those in the future; and "personal feedback in which the member and the group join in a search for connections between his membership behaviour in the T Group and his reported experiences and anticipation with other groups."

Several studies have been reported on the effect of feedback in the T Group on change of the individual's behaviour. Lippitt (1959) has reported that in one study 13 out of 14 feedback group members changed in the direction in which the group wanted them

to change, while only 8 out of 14 in the nonfeedback group showed such change. Gibb (1960) in several studies found that those who got feedback had higher commitment to and expectations from the group.

Comparing the laboratory training and therapeutic groups Horwitz (1964) comments : "The training group depends more upon personal feedback from one's peers, while the therapy group depends largely on the therapist's interpretation of transference to him."

Myers *et al* (1969) found that subjects in experimental groups who filled out sociometric questionnaires and received feedback on their mutual ratings showed a significantly greater increase in sensitivity during a 3-day period than control subjects who were not exposed to sociometric procedure. Subjects in control groups who rated one another but who did not receive feedback did not show a significant increase in sensitivity between the beginning and the end of the workshop.

Some studies have reported the use of feedback in changing classroom behaviour of teachers. Pareek and Rao (1971) used interaction analysis and found his technique as very effective in changing teachers' classroom behaviour. Feedback was given by the experts as well as colleagues in the same experiment. Feedback from students has been found to be effective in changing teachers behaviour. One study (Braunstein, Klein and Pacha, 1973) reports significantly greater increments in performance between midterm evaluations and evaluations collected at the end of the term in feedback condition. It seems that the dissonance caused by the feedback between self-perception and perception by others makes the feedback effective. Centra (1973), for example, found that student ratings produced more changes in those teachers who had rated themselves more favourably than their students. However, the amount of negative feedback may be an important factor also. Panbookian (1974) has reported that instructors who were originally evaluated moderately well benefited most from feedback.

Feedback has been tried for improvement of student overall performance. Borner, Hamilton and Best (1974) report a procedure which enabled each step of the solution of clinical problems to be evaluated independently by providing feedback to medical students at each decision point. Undergraduate medical students read an extensive data base and constructed problem lists, ordered diagnostic tests, and planned for the management of the patient.

Feedback is an essential part of human resources development in organisations. Performance and potential appraisal systems can not

be effective in the absence of effective feedback and employee counselling. For effective implementation of appraisal systems in an organisation, it is necessary to train managers at various levels in the skill of supportive and helpful feedback. Feedback should help an employee identify his strengths and weaknesses (giving emotional support to him whenever required) to contribute to his growth and development.

Feedback and Personality

Does the benefit from feedback depend on the personality of the individual receiving feedback? Or, what kind of feedback help which types of personality more? Some research evidence is available on these questions. One dimension of personality found to be significant in relation to feedback is locus of control. It has been reported that while intrinsic feedback (self-discovery of success) was effective in influencing the performance of those who were high on internal control, those who were high on external control attained superiority of performance under extrinsic feedback (unverifiable verbal praise) (Baron, Cowan, Ganz and McDoland, 1974). Similar results are reported by Seilack and Tillman (1974), those high on external control responded only to evaluation, and those who were high on internal control responded both to task differences and external evaluation.

The Process of Inter-personal Feedback

The process of interpersonal feedback is a transactional process: the transaction being between two individuals as a unit, although in a group such transactions are taking place in several pairs of individuals. The transactions are fairly complex. The feedback in this sense is not merely communication of impression by A to B but it is establishing understanding and a trusting relationship between two individuals. In order to understand the process in details, we shall examine the process of a feedback episode in detail. A feedback episode is one act of communication of information by an individual A to another individual B about how the former has seen the latter. The process of a feedback episode is diagrammatically shown in Figure 2. The various parts of the process are discussed below.

1. Psychological makeup of the persons involved in feedback (Boxes 10a, 10b and 11)

The logical and chronological beginning of a feedback episode is with A's perception of B's behaviour. But the psychological

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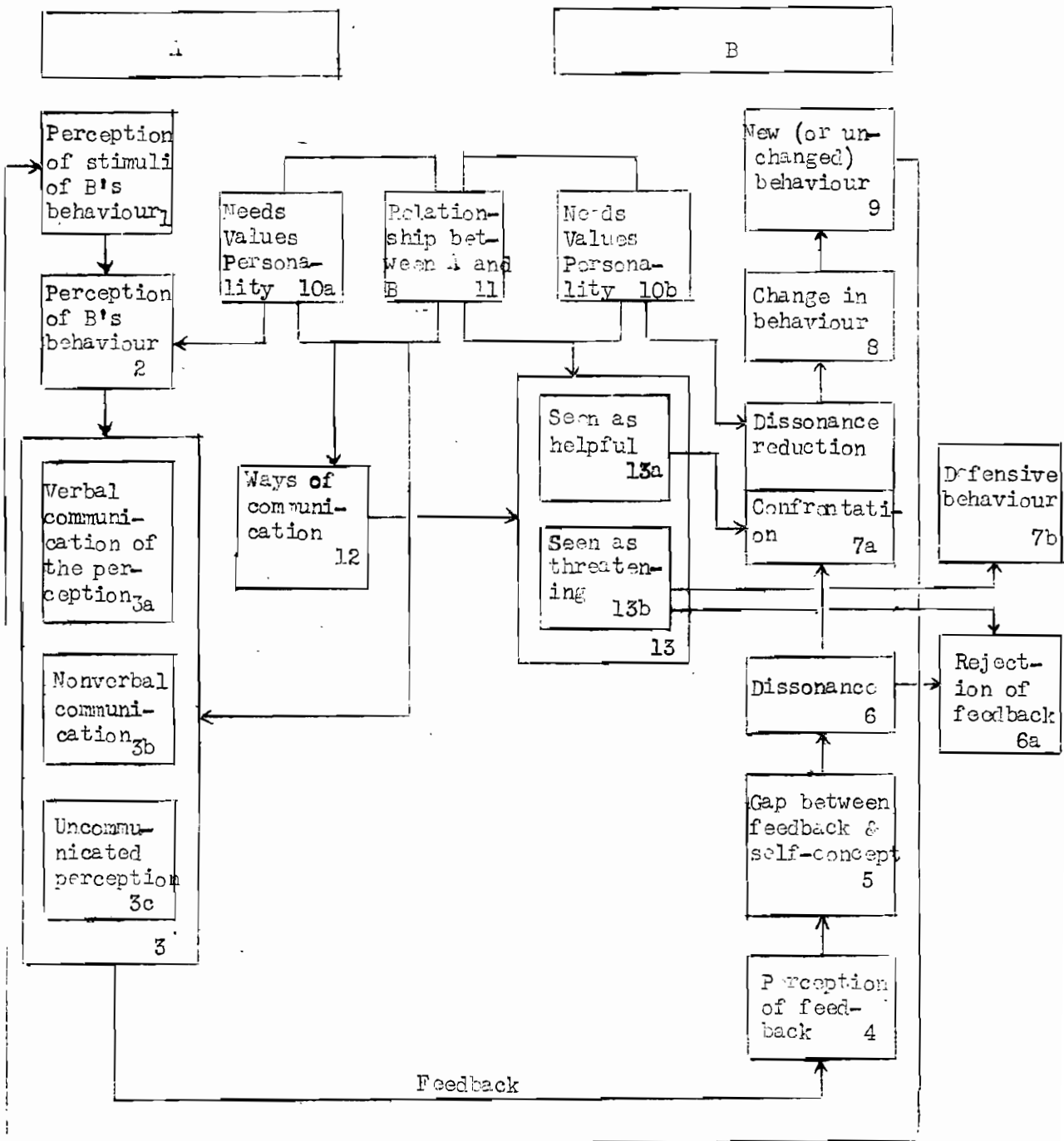


Figure 2
THE PROCESS OF A FEEDBACK EPISODE

backgrounds of both A and B function as intervening variables of which we should be aware in the beginning. Both individuals name their own needs, their value systems, and several aspects of their personality. An individual may have a high need of aggression while another individual may have a high need of dependency. These two individuals (both one who is giving and the other who is receiving feedback) will behave in entirely two different ways. In addition to their needs and other psychological background, they may have a pattern of relationship (Box 11). They may like each other, or may hate each other. They may have accepting or non-accepting relationship. These factors are important in influencing several aspects of the feedback episode.

2. A's perception of B's behaviour (Boxes 1 and 2)

In an incident where A and B are involved, and where B has shown some behaviour, A perceives the behaviour in certain meaning. He receives the stimuli of B's behaviour. For example, he listens to what B has said, observes how he has said it. In receiving both verbal and non-verbal stimuli (Box 1), A gives meaning to them (Box 2). The way he perceives or interprets the stimuli he has received from B depends to a great extent on his psychological makeup as well as the relationship he has with B. As shown in Figure 1, this perception (Box 2) is influenced by the intervening variable of the psychological makeup of the individual and his relationship with B (Boxes 10a, 10b and 11).

3. Communication of the perception by A (Box 3)

A communicates his perception to B, and this is what we usually call feedback. Communication may be either verbal (Box 3a) or it may be non-verbal (Box 3b). Usually verbal communication will be more open. If A is clear about what he wants to communicate and has no hesitation in communicating it, he will usually communicate verbally. However, more messages may be communicated through non-verbal cues. If A does not feel free to communicate to B, his resentment he may still communicate it by a smileless interaction, by a frown on his eyebrow (of which he may not be conscious), by indifference he may show to B and so on. These non-verbal cues are in many cases much more significant than the verbally delivered messages. In many cases, the non-verbal cues may be just the opposite of what is verbally communicated. For example, A may tell B that he is enjoying the conversation and the points raised by him, but may look at his watch from time to time, without being aware that he is giving a non-verbal signal of being fed up. Such contradictory verbal and non-verbal messages may distort communication and may reduce the effectiveness of feedback. In many cases, the non-verbal cues are much stronger and the message may be loud and clear.

In many other cases, the non-verbal cues may be fairly weak and may not be picked up by B. There are many perceptions, however, which remain uncommunicated (Box 3c). An individual may feel highly agitated and yet he may not communicate his resentment or anger either in the verbal form or through non-verbal cues. Such uncommunicated perceptions may distort the communication further and may come in the way of effectiveness of feedback. As shown in Figure 2, the way the message is communicated -- verbally or non-verbally, or some perceptions remain uncommunicated -- is greatly influenced by the individual's personal background and his relationship with the other individual.

4. A's Style of communication (Box 12)

One important variable in the feedback episode is the way A communicates his perceptions to B. Again A's personal background and his relationship with B influence this. As we shall see in a later section, many ways of communication contribute to the effectiveness of feedback. Whether A communicates his judgement and, therefore, his criticism and disapproval of B, or whether he communicates only how he has been affected by B's behaviour would make a great deal of difference to the feedback being effective or ineffective. These various ways are discussed in a later section.

5. B's perception of the feedback (Box 4)

After A has given feedback, usually verbally, B receives it and he perceives the feedback in a particular way. We may see it as A had intended or his perception may be quite different from what A wanted to communicate. For example, B may perceive the feedback given by his boss that he appreciated what A did as a cue for B to get approval for various things he does from his Boss A, although A's intention may have been to communicate that B could independently do several things now. These perceptions do not get cleared unless they are checked, and one important part of feedback is the checking of such perceptions of messages.

6. B's perception of A's style of communication (Box 13)

Along with the perception of the message, B also reacts the way the message was sent by A. If the communication was more descriptive and personal, providing personal data by A about how he felt in relation to B's behaviour, or helpful in encouraging B to try new behaviour, he may see the communication as helpful (Box 13a). On the other hand, if A's communication is more accusing or judgmental, B may see the communication as threatening (Box 13b). Such perception is a crucial factor in determining what B will do with the feedback he receives.

7. Gap between the received feedback and B's self concept (Box 5)

When B receives feedback from A, the feedback may be quite close to what B thinks of himself. For example, if A communicates to B that the former saw the latter as emotional, B's reaction to this feedback will depend to some extent on whether B perceives himself as emotional or not. The feedback may either confirm what B thinks of himself or it may disconfirm his self concept.

8. Dissonance caused (Box 6)

If the feedback received from A confirms what B thinks of himself, it may reinforce his behaviour. However, if the feedback received from A disconfirms what B thinks himself, it may cause dissonance. Dissonance has been found to be an important factor in either producing change or rejection of the feedback. If the feedback is seen as threatening, and if it produces dissonance, it is more likely to be rejected (Box 6a).

Froeman (1973) in a study of undergraduate students found that subjects who received negative feedback reduced dissonance by rejecting the feedback by denouncing the interpreter, whereas subjects who received positive feedback were more likely to change their self-reports in the direction of the interpretation.

9. Dissonance reduction (Box 7)

The feedback is not outright rejected. Dissonance has to be reduced because an individual cannot live in a state of dissonance for long. Dissonance may either be reduced by confrontation or through defensive behaviour. We shall discuss these in more details in a later section. If B sees feedback as helpful, he may explore further with A. And, as a result of such exploration, he may do something about this feedback. This is confrontation (7a). However, if he sees it as threatening, he may use all the defense mechanisms to deal with feedback (7b).

10. Change in B's behaviour (Box 8)

Depending on the personality background of the individual and whether feedback received is seen helpful, B may take the decision to try new behaviour and therefore, change a part of his behaviour. Such experiments in change may satisfy him. Change in a behaviour as a result of feedback, will, therefore, depend on how feedback is given and whether it is seen as helpful by B.

11. B's behaviour after feedback (Box 9)

B may still continue to show his old behaviour if feedback has been rejected, or he may even use some defence mechanisms to deal with it. Or, hopefully, if he finds the feedback useful, and A has taken care to make it usable by B, he may indicate change in his behaviour and may show new behaviour. This behaviour starts a new cycle of communication. A perceives the post-feedback behaviour. Then a new episode starts beginning with the perception of B's behaviour by A. This cyclic process is indicated in the figure by arrow going from Box 9 to Box 1.

The feedback episode starts with A's perception of B, his background of needs, values, etc., his communication of his perception to B, B's perception of feedback as helpful or threatening, B's ways of dealing with the feedback (either by confronting it or by rejecting it or using defence mechanisms), and B's undergoing some change. As already stated, the transaction is much more complex than depicted here. But this paradigm does show the basic elements in such a transaction.

Types of Feedback

Feedback can be classified in several ways. Different terminologies have been used to denote the same type of feedback. We can discuss the following types.

1. Personal versus impersonal

Feedback may be given either in a face-to-face situation through verbal cues, or in an impersonal way. An example of an extremely impersonal feedback would be the use of mechanical symbols to give feedback. In personal feedback there is much more interaction, and mutuality develops as a result of such interaction. This may not be possible in impersonal feedback. Koilman and Stoneman (1974) in an experiment on learning of retardates have reported that verbal (personal) feedback resulted in better learning and retention than mechanical (impersonal) feedback.

2. Positive versus negative

Feedback in which information is given about the success of a person, or his effectiveness in a particular area, may be called positive feedback (although the words positive and negative are not a happy choice). Negative feedback may be used for the information

about a person's failure or lack of effectiveness in a particular area. Although the comparative effectiveness of positive and negative feedback will depend, among other factors, on the perception of and emotional relationship with the feedback-source, results have shown that positive feedback produces more credibility of feedback and results in improved performance. Undergraduates receiving feedback in an experiment by Jacobs *et al* (1973) consistently rated positive feedback as more credible. In another experiment of Jacobs's *et al* (1974) positive feedback was rated as more credible, desirable and effective. In another study by Butler and Jaffee (1974) negative feedback increased negative social emotional behaviour. Gibb (1960) found that positive feedback resulted in efficiency and participation and low defensiveness. In an experiment on concept learning Greene (1974) found that subjects learned from positive information indicating which response was correct. Positive feedback has been reported to increase group cohesion (Jacobs *et al*, 1974). Positive feedback produces "Pygmalion" effect (Rosenthal and Jacobson, 1968). Bridgman (1974) found that subjects given success feedback (i.e. told that they had received a high score on the previous test) scored significantly higher than subjects given failure feedback. Failure feedback also increase anxiety (Auerbach, 1973). Anxiety may cause negative social behaviour, and those getting positive feedback may have their energy for the tasks, and may become task-oriented (Butler and Jaffer, 1974).

3. Descriptive versus evaluative

The feedback can either describe the behaviour of an individual or may evaluate it, in terms of approval-disapproval. Weisenberg (1973) found that affective (evaluative) feedback was not as effective as informative (descriptive) in yielding a high performance level. However, both led to conditioning. Jacobs *et al* (1974) found that the credibility and usefulness of affective (evaluative) feedback is high only if the feedback is positive. In other words approval of a success or desirable behaviour is accepted and produces change; if failure experience is to be fed back, it may be better to do this without communicating disapproval. Jacobs *et al* (1973) report that those receiving behavioural (descriptive) feedback reported the most gain from the experience.

4. Specific versus general

Feedback may be either on the specific aspects of behaviour, or it may be a general descriptive. If a person gets feedback on specific aspects, he may be able to do something. However, if the feedback is in general terms, the person may not be able to take specific steps.

It, therefore, appears that specific feedback is likely to be more useful than general. Greeno (1974) has found this in his study.

5. Verbal versus nonverbal

Feedback may be given by using words, and by face-to-face communication with the other individual, or it may be given in nonverbal form. Usually verbal feedback is more open and intentional, while nonverbal feedback is more involuntary, and without much awareness on the part of the person giving feedback. A person's effectiveness in giving feedback can increase if he becomes aware of non-verbal cues he uses, and learns to communicate these in verbal form.

6. Self-administered play back

Discussion in a group or conversation between individuals may be tape recorded and the individual may play back the tape, listen carefully to what is said and what is not said, and may reflect on his verbal behaviour, others' reaction to him etc. Such feedback has been used in problem-solving clinics (Bouchard, 1969). Similarly, videotape can be played back and the person may get an opportunity to watch as well as listen to events in the group (Dehon, 1967). The advantage of videotape is that nonverbal cues are not lost, and a person can increase his sensitivity to such cues by using this feedback method.

7. Instrumented feedback

Robert Blake popularised the term instrumented feedback. Persons fill out questionnaires, forms, etc. and the results are summarised for the group (e.g. Heller, 1969). The results of the instruments can be given to the individuals, with their interpretations. The individuals are free to use them in any way they like. The advantage of such feedback is that the person getting the feedback has enough concrete data to examine and think. He may find it difficult to deny or reject the data.

Making the Transaction Effective: Giving Feedback

Feedback is an interpersonal transaction in which two persons are involved. The effectiveness of this transaction will, therefore, depend on the behaviour and response of both the persons, the feedback provider and feedback receiver. One who is giving feedback can do several things to ensure the effectiveness of feedback. What is discussed below indicates some of the things which a person who is genuinely interested in helping another person usually does, and, therefore, becomes effective.

1. Is descriptive and not evaluative

The person who gives feedback should describe what he sees happening rather than pass his judgement over it. The description can be either of the effect of the behaviour of the other person (B) on himself (A) ("your remark made me angry"), or the factual statement ("in the last 10 minutes, you repeated the same statement four times"), or the effect of B's behaviour on others as he observed it. Such descriptive feedback may provide enough data for the other individual (B) to think and take some decisions. On the other hand, feedback could be evaluative in several ways. Either the individual may make a judgement ("your behaviour was not proper"), or may criticise or categorise the behaviour ("you suffer from inferiority complex"), or may give advice ("you should be bolder"). Such evaluative feedback does not help a person. Descriptive feedback is helpful in making a person more autonomous in taking decisions about what he would like to do.

2. Is focussed on behaviour of a person and not person himself

The feedback is to help a person think about his behaviour and take decision to change his behaviour. The feedback given on the person as a whole is not helpful because it takes the form of evaluative feedback and the person does not know what he can do about it. When feedback is given about behaviour of a person, he is in a position to decide what could be done about that behaviour.

3. Is data-based and specific and not impressionistic

Effective feedback gives specific information about behaviour and provides data to the other individual in the form of observations, feelings which his behaviour has evoked, and various other facts observed. These help the person. However, if feedback is general and based on impressions, it tends to be more judgemental. Even if it is non-judgemental, it may not help a person prepare a strategy for changing his behaviour.

4. Reinforces positive new behaviour

Effective feedback helps a person decide which behaviour he will continue to be effective. When a person is experimenting with new behaviour, positive feedback is likely to reinforce his behaviour and he is able to stabilise it as a part of his personality. In this sense, positive feedback is very helpful. Criticism or negative feedback does not help. It only increases the chances of a person become defensive.

5. Is suggestive and not prescriptive

In many cases, the person giving feedback may suggest alternative ways of improving. For example, when the feedback indicates that person B is not able to confront people in the group, members may like to make suggestions for him to improve. However, these suggestions should be in the form of alternate ways open to B for increasing his confronting ability. Feedback given in the prescriptive form, i.e. what the person should do, does not help the person and it only makes him either dependent, or such advice is ineffective since the person himself is not involved in the decision taken.

6. Is continuous

Usually effective feedback does not stop with one act of feedback. It establishes a relationship of openness. The relationship is a continuing one, usually resulting in continuous feedback. Moreover, feedback when repeated is likely to produce better results. The repeated feedback may reinforce what was communicated and may give opportunity to the subject to discuss feedback. Foreit (1974) has reported better results with continuous feedback.

7. Is mostly personal

Effective feedback indicates the involvement of the person who is giving feedback in the process. If the person provides evidence from his own experience, and gives data about how he perceived or was affected by the other person's behaviour, this is much more genuine and helpful. If the person provides other information and data in addition to making his own feelings and perceptions available to the other person, these will be much more effective. However, if only objective feedback is given without the person making his own behaviour, the transaction of mutuality is not established and the feedback is not much effective.

8. Is need based and solicited

Feedback which is solicited by the person is much more effective than if it is given without such a need. The motivation of the person then is high to listen carefully to and use such feedback. Hensen (1974) found that feedback under solicited (learner-controlled) condition resulted in more decrease in anxiety, and led to higher error-elimination.

9. Is intended to help

The basic motivation of the person who is giving feedback is important. If his motivation is to criticise, or point out the fault, or convince the other person about the accuracy of his perception, the feedback will not be effective. However, if the feedback is intended to help the other person, this itself will influence the way feedback is given and it is likely to be very helpful.

10. Focussed on modifiable behaviour

The purpose of feedback is to help the other person do something about his behaviour and increase its effectiveness. This is possible when feedback focusses on behaviour about which the person can do something. For example, feedback given on stammering of a person may not be useful because it only reinforces his negative self image, and the person cannot do anything about the stammering in the normal course.

11. Satisfies needs of both

Feedback is a mutual transaction. For a transaction to be effective, it should satisfy the needs of both persons. Feedback also has to do this. The need of the individual who is giving the feedback may be to help, to influence and to establish better relationship. These needs should be satisfied and the person should be conscious of this, and use this for building mutuality. If the person giving feedback has a high need of recognition, and, therefore, feedback given by him is motivated by this need, he may at some stage share this, after he becomes aware of such a need. Feedback based on needs of both persons helps in building mutuality. And when the persons involved in feedback are able to share their awareness on such needs, the relationship of mutuality will be more effective.

12. Is checked and verified

While giving feedback, the person communicates one set of perceptions. Unless these are checked with the perception of various other persons involved, feedback may not serve the purpose. Feedback can be effective if an attempt is made both by the person who is giving feedback and the one who is receiving it to check it with various other persons in the group.

13. Is well-timed

Feedback should be well timed. Timely feedback has been reported to influence performance (Mosel, 1958; Weber, 1971). Timing

means several things. In the first place it should be immediately after the event has occurred on which feedback is to be given. Ward and Maisto (1973) report that delay of feedback significantly impaired the role of learning. Similarly Harrison (1973) reports immediate consequence (feedback) to be effective in learning, although Kipfel (1974) found no significant differences among groups receiving immediate or delayed feedback. The advantage of immediate feedback is that the person has higher motivation to reflect on the event, and can examine several dimensions of the event without much distraction.

Secondly timing would also mean that the person should be in a position to receive feedback and use it. For example, in a group situation when some feedback may be better given when there is enough trust in the group. In timing feedback the main criterion used should be whether the feedback is likely to evoke defensiveness. In circumstances where feedback is likely to be perceived as an attack or criticism, the feedback may not be helpful.

14. Contributes to mutuality and building of the group

Feedback should be instrumental in building relationship of openness, trust, and spontaneity. If it does not contribute to such mutuality, it cannot be said to be effective. Effective feedback not only contributes to mutuality, but helps in building the group through the development of interpersonal effectiveness of most of the members of the group. In this sense, feedback goes beyond mutuality of two persons and contributes to the growth and development of the entire group. The function of feedback to do this should be examined from time to time so that people involved in the feedback process may be able to take decisions and monitor the feedback mechanism for the achievement of this goal.

Making the Transaction Effective : Receiving Feedback

The effectiveness of feedback depends as much on how it is received and used by the person for whom it is meant (B), as much as on how it is given by A. As discussed in the process of a feedback episode, if the feedback confirms the image of B, it reinforces his behaviour. However, if the feedback disconfirms the self-image, or expectation, dissonance is caused. According to the dissonance theory, when an expectancy is disconfirmed, psychological tension is caused. Experimental evidence is available on subjects receiving discrepant outcomes as being more tense and more uncertain about the permanence of this outcome (Brideman, 1972; Feather, 1969). Dissonance may result either in change of behaviour, or in conflict and threat which may lead to what is called defensive behaviour. The person receiving feedback, may, therefore, broadly speaking,

use either defensive behaviour or confronting behaviour to reduce dissonance. Figure 3 gives the summary of two sets of behaviour, defensive and confronting. We shall discuss these in some details here.

Defensive Behaviour	Confronting Behaviour
1. Denial	Owning
2. Rationalisation	Self analysis
3. Projection	Empathy
4. Displacement	Exploration
5. Quick acceptance	Data collection
6. Withdrawal	Expressing feelings
7. Aggression	Help seeking
8. Humour	Concern
9. Competition with authority	Listening
10. Cynicism	Positive critical attitude
11. Intellectualisation	Sharing concern
12. Generalisation	Experimenting
13. Pairing	Relating to group
Results in conflicted self	Results in Integrated self

Figure 3

Defensive and Confronting Behaviour in Dealing with Feedback

When the individual feels threatened by the feedback he receives (for example, if he is criticised or blamed, or given what he may consider as negative feedback, which he does not deserve, or does not agree with), he may build some defense around his self so that he can protect his self from the threat. The concept of defense mechanisms was introduced by Freud. He studied several defense mechanisms people used in psychoneurosis. The use of defensive behaviour to deal with threatening feedback is like using pain killing drugs to deal with the pain experienced by a person. These reduce the awareness of the pain; but they do not deal with the main cause of the pain. The same is true of defensive behaviour. Defensive behaviour may create an illusion of having dealt with the situation, but

it does not change the situation or behaviour. For example, if a subordinate receives negative feedback from his superior officer that his motivation in the past year has been low, he may feel threatened by this feedback. He may reduce the threat by projecting his anger to the superior officer and say that he is saying this because he is prejudiced. This may satisfy him and he may not feel threatened any more. However, this neither changes the situation (the superior officer will continue to feel that his subordinate has no motivation), nor the behaviour of the subordinate (the subordinate will continue to feel that his superior officer is prejudiced, and, therefore, he need not change his behaviour). Defensive behaviour, therefore, does not serve the purpose, and it may merely reduce anxiety. The conflict in the self is not resolved. Excessive use of defensive behaviour is likely to result in conflicted self, or to what Golembiewski (1972) calls degenerating process. On the other hand, if confronting behaviour is used, the conflict is reduced and continued use of such behaviour will result in an integrated self, or what Golembiewski (1972) calls ~~degenerating~~ process.

It is not the intention to suggest here that defensive behaviour in all situations is bad. Nor are we suggesting that no defensive behaviour should be used. All of us use some amount of defensive behaviour, and it is not possible to do away with it. In many situations, defensive behaviour may be functional. However, if the main purpose of feedback is to develop mutuality, and if both persons involved in giving and receiving feedback are interested in building a relationship of trust and openness, the more defensive behaviour is used, the less effective the feedback will be. In order to make feedback effective, an attempt should be made to move away from defensive behaviour toward confronting behaviour. The individual receiving feedback may examine what defensive behaviour he more often uses, and he may prepare a plan (preferably taking help of some other person or persons) for reducing this behaviour and moving towards the corresponding confronting behaviour as indicated in Figure 3. We shall discuss these pairs of defensive and confronting behaviour below.

1. Denial versus owning

If a person receives a negative feedback which threatens him, the first tendency is to deny it. Denial will certainly reduce the anxiety because he may convince himself that what he was told was wrong and he need not bother about it. But it does not help the individual change, nor the situation to improve. The corresponding

confronting behaviour in such a situation would be owning up the feedback even if it is disturbing. Owning the behaviour is much more difficult and Argyris (1971) has suggested that it is at a level in the hierarchy of behaviour contributing to interpersonal competence. Owning up does not mean readily accepting the feedback. As we shall see later, quick acceptance is also a defensive behaviour. Owning up means being open to accept the limitation after examining and collecting necessary data from various sources so that the individual then may be able to do something about it. Owning up indicates the respect the person has for himself, and only highly self-respecting persons are prepared to own up their behaviour which may be seen as their limitations or weaknesses.

2. Rationalisation versus self analysis

The usual tendency with negative feedback is to find the reason to explain one's own behaviour. For example, if an employee receives the feedback that his motivation was low, he may find a reason to explain this low motivation - which is the process of rationalisation - and thereby absolve himself of the responsibility for low motivation. He may ascribe it to his physical ill health or to some problems in his family and so on. Not that there may not be reasons for low motivation, but quickly finding reasons for some behaviour prevents a person from owning that behaviour and being responsible for it. Rationalisation, therefore, does not help. Instead, if the person does some self-analysis, and finds why this kind of behaviour was picked up or what is the meaning of this feedback in relation to what he usually does, he may find many things to ponder over and he may get some ideas of improving his behaviour.

3. Projection versus empathy

In most cases, negative feedback causes anxiety and resentment in the person. If the source from which the feedback is received is not trustworthy and it is difficult for the individual receiving feedback to openly explore with him, he is likely to feel resentful and angry. A person cannot be angry without any cause; otherwise, it will create dissonance and conflict. In order to reduce this conflict, and in order to justify resentment, the person receiving feedback may project his feeling of resentment, and to the person giving feedback. Then onwards, he may see the person who is giving feedback as angry, biased, etc. This is the process of projection. In projection, the person projects his own feelings about the other person to the latter one. Projection is a defensive behaviour and may help reduce anxiety. But like other defensive behaviour, it does not help. Instead of being angry, and therefore, project resentment to the other person, it may be useful for

the person receiving feedback to empathise with the other person, try to see from his point of view and understand why such negative feedback has been given. This may help in increasing understanding.

4. Displacement versus exploration

Another well known defensive behaviour is that of displacement, when an individual who cannot express his anger or resentment to a person who has given feedback because the latter may be in a powerful position; expresses his anger to somebody else who is weaker than himself. An employer who becomes much more strict with his own subordinates after he gets negative feedback from his boss is an example of displacement. Displacement is usually used in situations in which the person giving feedback is in a stronger position, and the person receiving feedback cannot easily express his resentment to him. A more helpful behaviour may be to explore with the person who has given feedback by asking him where and how this behaviour was seen. Discussing the details with him may help getting more evidence and dispelling some of the misgivings of the feedback provider also.

5. Quick acceptance versus data collection

Quickly accepting a feedback is one of the forms of rejecting the feedback. The best way to kill an idea is to feed it with sweet words. When a person accepts feedback without any consideration, he wants to escape the possibility of exploring and doing something about the feedback. Instead of quickly accepting the feedback given, it may be better to collect the different aspects of feedback both from the person who is giving feedback and from other sources. This may help in increasing interpersonal effectiveness.

6. Withdrawal versus expressing feelings

When a person feels helpless, and finds himself in a position where he cannot express his resentment, he reacts by losing interest in his work, cutting out his interaction with the person who is giving feedback and generally showing signs of withdrawal. Such withdrawal behaviour may not be helpful and may, in fact, deteriorate the situation. The more confronting behaviour which may be helpful in such a case is expressing of feelings of being hurt to the person who is giving feedback. It is a difficult thing to do; but if the person tries to practise it by expressing the feelings in a matter of fact way, communicating that certain things hurt him, he may find it increasingly easier to do this in future.

7. Aggression versus help-seeking

Another form of defensive behaviour is expression of aggression towards the person who has given feedback. After receiving the feedback from a person who is seen in a lower position or less powerful position, the person receiving feedback who is in a more powerful position may shout at him or may express aggression in various other forms. This may be easier to do; but it does not solve the problem. Instead of showing aggression, if the person who is receiving feedback seeks the help of the person who has given feedback in knowing more about that part of behaviour, and in planning ways of dealing with it, the feedback is likely to be used for changing behaviour for the better.

8. Humour versus concern

In some cases, humorous ways of dealing with feedback are also employed. Humour is a great quality. However, when it is used to cover up something, and to reduce anxiety caused because of dissonance, it does not help, and it becomes dysfunctional. Instead, the person may show concern and this concern will help him explore further in the direction of improvement of behaviour.

9. Competition with the authority versus listening

In a T Group situation, a member who receives negative feedback is likely to deal with it by competing with the trainer (the symbol of authority), by putting alternate theories to challenge the trainer or by suggesting different ways of interpretation, etc. This may be highly satisfying to him. However, this may be dysfunctional. The member may be benefited if he listens to what has been said.

10. Cynicism versus positive critical attitude

Negative feedback can be brushed aside by cynical attitude, that most people say things which do not deserve consideration and that, in general, things are pretty bad. On the other hand, a positive critical attitude helps a person examine what feedback is given and sort out those parts which seem to make sense and reject others which do not come up to the criteria he sets to examine them. Such attitude is helpful.

11. Intellectualisation versus sharing concern

In a T Group situation, or in some other group situations, negative feedback is ignored by a process of intellectualisation, spinning

theories in explaining matters when the real need may be to share the concern the person has with others and take their help in dealing with the problems he may be facing.

12. Generalisation versus experimenting

One form of defensive behaviour to deal with negative feedback is to generalise what has been said. If a person, for example, receives the feedback in a group that he used words indicating that he was scolding the other person, and that his tone was also authoritarian, the individual receiving such feedback may say that this is true in general about people who have been brought up in the Indian culture and in the Indian family. Such generalisations may not help. Instead, if the individual experiments with a different kind of behaviour to see whether he can change his behaviour, inspite of this being culturally-determined or influenced, rather than seek refuge in generalisation, he may be benefited.

13. Pairing versus relating to group

In a T Group or some other group, a person receiving feedback has a tendency to pair with another person (or other persons) in the group who also seem to have received such negative feedback, and therefore, feel threatened. This may give a comforting feeling to people being together under such "attacks." Confronting and helpful behaviour may be to relate to the group by exploring with several members of the group and taking their help instead of pairing with one or a few. This may help in further explorations and experimentation.

The use of conflicting behaviour may help a person build relationship for getting further helpful feedback. The way a person receives and uses feedback will, to some extent, also influence the way persons give helpful feedback. He may plan to test the ideas and experiment on a limited basis and may further seek feedback to know whether his ways of improving himself are seen as effective. This may set a cycle of self-improvement and increase his interpersonal effectiveness. If feedback is given in the spirit of helping the other person in building a relationship of trust and openness, and if it is received in the spirit of learning from the situation to increase interpersonal effectiveness, and to contribute to such relationship of trust and openness, feedback can be an effective instrument in building linkages of mutuality between persons and amongst various members in a group. However, if feedback is not properly given or properly received, it may contribute to the disruption of relationship and may undermine the development of the group. Feedback, therefore, is a powerful instrument and can be used effectively. It depends on the person who is giving feedback and the

person who is receiving feedback that this instrument can be used for forging bonds of mutuality. If both persons involved in the feedback transaction take definite steps to improve their skills of giving and receiving feedback, as outlined in this paper, they can initiate, and build a new process of mutuality.

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