

INDIVIDUAL DECISION-MAKING

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The Nature of Decision-Making

Human behavior results from either conscious or unconscious processes. When these processes are conscious, decision-making is involved; when unconscious, conditioned habit patterns and stereotyped reactions are involved. Thus the acts of an individual may be distinguished in principle as those which are the results of deliberation, calculation and thought and those which are unconscious, automatic, responsive and the results of habit formation (Tannenbaum, 1950).

Etymologically, "to decide" means to "cut off". It suggests coming to a conclusion, albeit tentative. It presupposes consideration of a matter causing doubt, wavering, debate or controversy and implies the arriving at a more or less logical conclusion, that brings doubt, debate, etc. to an end (Webster, 1965).

Vocationally "to decide" implies a process of goal exploration and crystalization (Tiedeman, 1961). Ideally, it suggests that the individual's vocational interests have developed in an orderly and controlled manner. Thus early experiences, attitudes, abilities and interests are related to the eventual vocational choice and entry into an occupation (Roe, 1966). It has been suggested by Ginzberg (1951) that there are three periods of occupational choice; the period of fantasy choice; governed largely by the wish to be an adult;

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the period of tentative choices, beginning at about age 11 and determined largely by interests, then by capacities and then by values; and the period of realistic choices, beginning at about age 17.

Philosophically, "to decide" implies that man is free to choose and act upon that choice. There is no way man can avoid making a choice and no way of escaping from the consequences of choice-making. Even if man permits someone else to choose for him, he has chosen to allow this to happen. Sometimes the individual has no control over the physical circumstances which surround him, even then he has the freedom to choose the thoughts he thinks and the attitudes he possesses. In this regard, Rogers (1960) points out that freedom to choose may be essentially an inner thing, quite apart from any outward choice of alternatives. It is the type of freedom that Frankl vividly describes in his experience in concentration camps when everything - possessions, identity and choice of alternatives, was taken away from the prisoners, the last of human freedoms remains - that of choosing one's attitudes in any given set of circumstances.

Factors affecting the Decision Process

A variety of factors influence the action which results from the presentation of a number of behavioral alternatives. To understand what is involved in a decision, it may be helpful to examine aspects of the individual and his society which influence the direction of choice.

1. Perceptual factors

Before making a decision, an individual should become aware of all those behavioral alternatives which are relevant to the decision to be made. Granting that man is in continuous search and pursuit of relevant facts and data which constitute the essential qualities of information, does not negate the individualistic context of this pursuit. Perceptual factors, notably those which refer to the ways in which an individual acts upon potential information, influence the decision process.

Gardner (1959) discusses five perceptual control principles

which relate to client awareness of relevant information. These include: leveling-sharpening, equivalence range, tolerance for unrealistic experiences, scanning and field articulation.

The complexity of the process of taking-in relevant information, coding it and matching it with established cognitive categories can readily be overlooked by the counselor and client alike. Often the client's information about his behavioral alternatives, be that in the vocational or attitudinal and behavioral context, is sketchy and incomplete. Although objective information is available from a variety of sources, it is doubtful whether most decisions are based upon an awareness of all the relevant information. Often it would appear that the individual is not tuned in to the information which is at his disposal. At other times, very limited experiences inhibit his search for information. On still other occasions, information is not readily available. He can tap the experience and knowledge of others, but this process is often excessively time consuming and does not guarantee coverage of the desirable information. As the guidance program develops, we will need to improve the sources of information (facts-data) as well as gaining a clearer understanding of the mechanisms involved in the perceptual process. We will need to discover how to optimally use the information for effective decision-making.

2. Anticipatory responsiveness

Once the individual has become aware of the information regarding certain behavioral alternatives, he is next faced with the problem of defining each of them. Ideally, this definition involves a determination of all the consequences related to each behavioral alternative under consideration. It requires the individual to imaginatively project himself into each possible alternative and anticipate the behavioral consequences. It remains doubtful, however, that the individual can clearly anticipate future events for the following reasons:

(a) Whenever the future is anticipated, uncertainty is present with the resultant anxiety. The individual's knowledge of the future is always partial. He can never accurately determine the nature of the consequences of a given behavioral alternative or even the pro-

bability of its occurrence. Because the individual cannot clearly anticipate the future, he attaches values to certain courses of action. Values are important in reducing the anxiety associated with anticipatory uncertainty, and thus freeing the individual of the paralyzing effects of anticipatory ambiguities.

(b) A second reason why an individual cannot determine all the consequences of the behavioral alternatives is a matter of shortage of time. Generally a decision must be made before all the foreseeable relevant possibilities can be explored.

(c) A third reason for the difficulty of anticipating future events is the rapidity of change. Never before has man confronted technological revolution with such dramatic ramifications as in the 20th century. To make long term projections and anticipate future behavioral alternatives within an atmosphere of flux is difficult. At best, it is possible to project by successive approximation of future events and thereby build-in corrections as time proceeds.

(d) A final difficulty in defining the consequences of behavioral alternatives is the magnitude of possible courses of action. By some principle of selection and elimination, the individual decides upon a course of action.

3. Cognitive Integration of Behavioral Alternatives

The first step in the decision-making process is becoming aware of the behavioral alternatives, the next is anticipating the consequences of each alternative, and finally the individual must exercise a choice between them, i.e. make a decision. What can be said of the mental processes which culminate in decision?

The decisions an individual makes are basically of two types. Some (a very small proportion) of his decisions are directly related to his ultimate ends. These are the ontological decisions. All other decisions are directly or indirectly related to the means for the attainment of the ontological ends.

The idea of ontology is used here, with the realization that the individual's behavior is guided by innumerable ends for each of which there are related means. The end of one means - end nexus becomes a means to a higher order end. Decisions relating to ontological ends, cannot be adequately evaluated. Their content is primarily ethical. They relate to definitions of the nature of "good" and "bad".

A large variety of decisions are not directly influenced by ethical considerations. They are made in terms of related intermediate ends. In choosing between alternatives, a rational individual will attempt to make a selection within the limits of his knowledge, which will maximize results at a given cost and risk or which will attain given results at the lowest cost. (Edwards, Lindman, Phillips, 1966). Thus the individual has a criterion to guide his behavior, the criterion of rationality.

There are definite limits, however, to rational behavior. We all feel that decisions should be made rationally, but are unsure of what we mean by rational behavior. A reading of the formal mathematical and philosophical literature about rationality unfortunately only increases the confusion. Perhaps 20 or 30 criteria by which a rational decision can be distinguished from an irrational one have been proposed and seriously studied. Among these are such principles as decidability, transitivity, dominance, utility and probability. (Edwards, Lindman, and Phillip, 1960).

One further point should be considered in analyzing the cognitive dimensions of decision-making. What initiates the decision-making process? What makes it possible for the individual to focus upon a problem, when at a given moment in time many problems compete for his attention. The ability to focus in upon one problem and push into the background other concerns may be one of the characteristics of mental health. In this regard, Wishner (1953) gives evidence that individuals with psychopathology are characterized by a preponderance of diffuse behavior and an inability to deal with a specified problem.

Simon (1947) points out that decision-making is initiated by stimuli external or internal to the individual which channel his attention in definite directions. These stimuli may be deliberate and planned. For example, operant reinforcement procedures have

been shown to significantly modify specific responses. Within the school counseling setting, studies by Krumboltz and Thoresen (1964) indicate quite conclusively that counselors can influence the amount of self-initiated occupational information-seeking behavior a high school student will engage in. By use of a variety of reinforcement and modeling techniques, students engaged in more independent information seeking activity.

Still within the school environment, Ryan (1964) showed that counselors can significantly influence the client's tendency to make either a decision or deliberation responses by systematically reinforcing selected client statements. She further demonstrated that behavior which has been modified in planned reinforcement counseling will generalize to a non-counseling environment.

Whereas some stimuli that impinge on the individual are planned, others are accidental and arbitrary in character. Guidance and counseling programs have been developed to reduce the probability of accidental and arbitrary exposure to important sources of stimulation. The dissemination of occupational information and counseling have been designed to improve the individual's understanding of behavioral alternatives and thus indirectly influence his decisions.

Summary

In some respects, human growth and development can be described as the accretion of a chain of decisions. The ability to make appropriate decisions then becomes of key importance. But precisely how individuals arrive at decisions is an open question. The process of decision-making has received little direct attention. The nature of decision-making was examined and defined as a conscious rational act in contrast to automatic and reflex acts. The decision-making model presented in this paper included perceptual, anticipatory, and integrative or evaluative factors. It was suggested that the decision-making process is instigated by inputs from the environment or internally which the perceptual mechanisms assimilate, code and categorize. Anticipatory responses require the individual to imaginatively project himself into the possible alternatives and anticipate the future. Man's knowledge of the future is always partial. At best his projections about the future must be successively approximated and corrective factors built-in as time proceeds. Several criteria of rationality which are related to the decision-making process were presented.

References

- Edwards, W., Lindman, H., Phillips, L.D., "Emerging Technologies for Making Decisions", in New Directions in Psychology, Holt Rinehard and Winston, 1966.
- Gardner, R.W., Holzman, P.S., "Cognitive Control: A Study of Individual Consistencies in Cognitive Behavior", Psychological Issues, I, No.4, 1959.
- Ginzberg, E., Occupational Choice, New York, Columbia University Press, 1951.
- Krumboltz, J.D. and Thoresen, C.E., "The Effect of Behavioral Counseling in Group and Individual Settings on Information-seeking Behavior." Journal of Counseling Psychology, 1964, II, pp. 324-333.
- Roe, Ann, The Psychology of Occupations, New York, Wiley, 1956.
- Rogers, Carl, "Interview between Rogers and Skinner", Recording, 1960.
- Ryan, T.A. The Influence of Counselor Reinforcement on Client Decision-making and Deliberating Behavior." Unpublished doctoral dissertation, Stanford University, 1963.
- Simon, H.A., Administrative Behavior, New York, Macmillan Co., 1947.
- Tannenbaum, R., "Managerial Decision-Making", University of California Reprint No.9., 1950.
- Tiedeman, D.V., "Decision and Vocational Development", Personnel and Guidance Journal, Vol. 40. 1961, pp. 15-20.
- Wishner, J. "The Concept of Efficiency in Psychological Health and Psychotherapy," Psychol. Rev. 1955, 62, 69-80.

Sous quelques rapports, le développement humain ressemble à la totalité d'une chaîne de décisions. La capacité pour prendre une décision devient donc une question de première importance. Mais personne ne sait exactement comment l'individu arrive à une décision. Dans cet article l'auteur examine ce problème et décrit le processus comme un acte de la connaissance et de la raison, par contraste avec les actes automatiques et réflexes. Le modèle pour cette opération contient les éléments de la perception, de l'anticipation, de l'intégration ou de l'évaluation. L'opération commence quand l'individu reçoit un stimulus du monde extérieur ou intérieur, que le mécanisme de la perception assimile, codifie, et enfin catégorise. Puis l'individu s'imagine toutes les lignes de conduite possibles, et en envisage les résultats probables. Il juge l'exactitude de ses jugements en les vérifiant auprès de la réalité actuelle; l'individu doit modifier ses idées sans effort conscient. A cet égard l'auteur étudie quelques critères pour évaluer la nature raisonnée de cette opération de l'esprit.