

DECISION MAKING IN THE HUMAN SERVICES: A GUIDE FOR MANAGERS

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INTRODUCTION

Decision making is a crucial activity of every type of social work at every level of a social service organization. On the administrative level, critical decisions are made regarding the goals of the agency, its relationship to the community, the maintenance of the organization, and initiation of organizational change. At the direct service level, decisions are made regarding client assessment and selection of service technologies (Neugeboren, 1985). Decision making by the various staff of social service organizations bears consequences not only for the continued existence and efficiency of the agency and its programs, but the well being of the people that are served. However, despite its importance to the delivery of social services, decision making is a complex process that is difficult to understand and subject to ineffectiveness.

Drucker (1974) believes that many organizations, be they business or service organizations, suffer from ineffective decision making because management does not understand the decision-making process. In a study of the decision-making strategies of policy makers, Scarpino, Dunn, and Mitroff (1983) found few policy makers who are attracted to or well equipped to solve the unclear and ill-structured problems that they routinely encounter. They constantly run the risk of solving the wrong problems precisely, rather than finding an approximate solution to the right problem.

Mitroff, Emshoff, and Kilmann (1979) add that managers are often beset with pressures from the organization to act both immediately and decisively. Therefore, committing time to defining the decision situation and searching for the information to make an effective decision are unaffordable luxuries. As a result, the manager is required to take an action which will demonstrate only after the fact whether it was the right or wrong solution.

This phenomenon is evident to a high degree in social service decisions. A common example is the planning of foster family placement of a child removed from his/her natural parents. Reistroffer (1972) calls this "crash planning" because the social worker usually has two to five days to accomplish the placement. At the same time, the information needed to make the best possible decision, usually derived from the natural parents or other agencies, lacks the objective detail relevant to the decision situation. As a result, the child is placed without suitable criteria, and the subsequent period of foster care provides the observation and data collection that either verifies or contraindicates the decision already made (Reistroffer, 1972).

In addition to the risks of addressing the wrong problem and trial-and-error selection, the nature of social service decision situations suffer from a high degree of uncertainty. The ambiguity of the human condition and the pluralism of social phenomena prevent rational analysis or a high degree of predictability (Brannon, 1985; Neugeboren, 1985). In a study of 50 decision situations encountered by the staff of a public welfare agency, only six percent were described as clearly defined, and in only 16 percent of the situations did participants express confidence in their ability to predict consequences. The real threat to effectiveness was evident in the action or lack of action taken in these decision situations. Fourteen percent went unattended by oversight, 36 percent were handled by conscious avoidance, and in only 50 percent of the cases was a rational resolution attempted (Brannon, 1985).

Another study of the decisions by Child Welfare caseworkers demonstrated a more positive rate of effectiveness. In this study, 762 case decisions were examined in the county Child Welfare agencies of three major cities, and there was a high level of agreement that there was substantial and relevant case information on which to base these decisions. However, when the individual workers were surveyed on their decision paths, there was substantial difference in the criteria for their decisions. As many decisions were based on the predilections of the worker and their agencies, value preferences, and professional biases, as were based on the actual data regarding the child's situation. This suggests that, although effective clinical decisions are being made, the strategies which lead to the decisions are highly varied and personalized despite the availability of information for rational analysis (Phillips, Haring, and Shyne, 1972).

For Fabricant (1985) and Schoech and Schkade (1980), it is essential that social workers exercise individual styles of information synthesis and understanding of the complexities of intra-psychic dynamics and social forces. They believe that the flexibility to combine factual data, professional experience, and intuitive judgment enriches understanding and enhances the quality of service.

Weissman (1980), adds that flexibility and discretion are critical to effective decision making for social service administrators as well as clinicians, as long as the approach matches the functions and type of decision situations encountered in their respective positions. Each staff level has its own set of objectives, technologies, and professional skills. Similarly, the decision situations faced by each type of staff hold distinct assumptions, types of information, criteria for evaluation, and predictability of outcome. The most effective decision making, in his estimation, is an individual strategy that incorporates data analysis, and judgment in a way that best fits the function that the social worker performs for the organization. Scarpino, et al. (1983) add that improved policy decisions are contingent on policy makers' understanding their own and alternative conceptual models, values, and styles of information processing, and applying those that best fit specific decision situations.

This study attempted to identify the various decision-making strategies employed by social workers in contrast to the range of functions from direct service to administration. It further explored a set of predetermining factors, both individual and organizational, that have been suggested in the literature as potential influences on decision-making strategy. The overall purpose was to undertake a systematic analysis of how these influences interact in the adoption of one or another decision-making approach.

CONCEPTUAL MODEL

Because decision making is essentially a "means-end" process that bridges the gap between the point of departure (the presenting decision situation) and the achievement of the objective (the final choice that has been selected), the particular means or method of proceeding with this process becomes the strategy of the individual decision maker (van Gigh, 1978).

Although different writers have elaborated on the various procedural steps in this "means-end" process (D'Zurilla and Goldfried, 1970; Janis and Mann, 1977), the overall process can be condensed into two broad phases:

1. the information gathering phase
2. the solution selection phase (McKenney and Keen, 1974; Myers, 1962)

McKenney and Keen (1974) consider the information gathering phase as a perceptual process by which the mind organizes the diffuse verbal and visual stimuli it encounters. The second phase of selection consists of evaluating this information through a specific sequence of analyses.

For the purpose of this study, these two phases of decision making were operationalized from a classification system developed by Isabel Briggs Myers (Myers, 1962; Myers and McCaulley, 1985). This presents the information gathering phase as a continuation from Sensing (gathering data from the environment) to Intuition. The solution selection phase is reflected by a continuum from Thinking (cognitive analysis) to Feeling (subjective judgment).

This model was selected for this study because it parallels other models (Huysman, 1970; Mason and Mitroff, 1972; McKenney and Keen, 1974; Mitroff, 1974; Thompson and Tuden, 1959). Also, Kilmann and Mitroff (1976) find this model particularly useful to organizational studies because it applies the logic and precision of Sensing and Thinking, and the flexibility and personalism of Intuition and Feeling to the different functions and goals of human organizations. They also find it an unbiased classification system.

The literature that addresses the influences on decision-making strategy falls into two broad groups: that which suggests that the personality or personal attributes of the individual influence style of information gathering and solution selection; and that which suggests that strategy is adapted to structural or environmental attributes of the decision situation.

The literature that focuses on the individual suggests such influences as gender (Copeland, 1983; Stricker and Ross, 1964; Witkin, 1979), personality (Argyris, 1982; Bowen, 1966 and 1982; McKenney and Keen, 1974; Myers, 1962), and family of origin (Bowen, 1966; Kerr, 1981; Sobel, 1982). Males are thought to be more analytical, and females to be more intuitive through socialization. Individual autonomy has been suggested a key personality factor in decision-making style. Highly independent, self-directed individuals have been found to have more highly developed analytical skills than less autonomous or socially dependent individuals. (Bowen, 1966; Gardner, Johnson, and Messick, 1960; Kerr, 1981) Birth order, as a specific aspect of family of origin, was found by Toman (1976), Wiseman (1982) and Bork (1982) to influence styles of problem solving through other factors such as autonomy and professional position. Eldests and only children are expected to be more autonomous as adults and aspire to higher levels of professional advancement than those who were middle or youngest in their families of origin.

The professional positions of social workers have also been linked to decision-making strategy because of the type of decision-making situations that are frequently encountered in respect to functional role. Social service administrators tend to deal with organizational and fiscal problems that are technical and concrete, calling for an analytical approach, whereas, the human-centered problems confronting clinicians call for intuitive judgment (Johnson and Lyman, 1978; Thompson, 1970; Weismann, 1982). Position has also been linked to gender (Figuiera-McDonough, 1979; Knapman, 1977; Sutton, 1982) because males are expected to aspire to administration through socialization, while organizational discrimination prevents women from advancing within agencies.

Those authors who suggest that styles of information gathering and solution selection are adapted to specific situations identify such environmental factors as time (Argyris, 1982; Mitroff et al., 1979), adequate information (Finsterbusch and Motz, 1976; Thompson and Tuden, 1959), and problem structure (Kilman and Mitroff, 1976; Mitroff, 1974; Scarpino et al., 1983). Deadlines or time constraints are thought to prevent an adequate degree of information from being acquired for analysis, therefore forcing individuals to rely on intuition and judgment. Problem structure, defined as the degree of clarity, detail and predictability of outcome, is thought, like an adequate amount of information, to allow for precise data collection and analysis.

The array of possible influences on decision-making strategy presented in the literature, therefore, includes individual,

organizational and situational factors. These influences were also found to be linked with one another as well as with the outcome of information gathering and solution selection. In order to examine this pattern of influences collectively, Systems Theory provided the conceptual framework for a single integrated model of multiple paths of influence. This orientation was selected as a basis for this study because it allows for a wider context of factors than other theories. It accounts for the interrelatedness of factors and allows for the inclusion of relationships that reflect alternate causal explanations (Anderson and Carter, 1974; Churchman, 1971).

The single model of factors and relationships examined in this study are displayed in Figure 1. The arrows reflect the hypotheses that were tested, and imply positive associations.

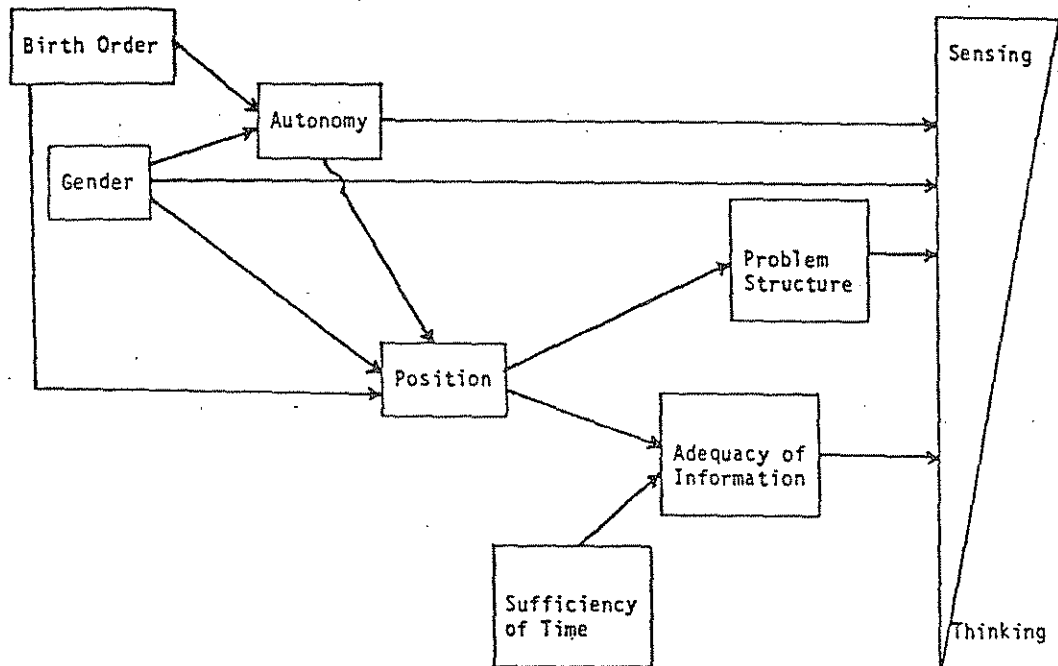


Figure 1: Hypotheses Under Study

METHODOLOGY

This path model was tested in a single agency setting, Catholic Charities of the Diocese of Pittsburgh. This is a large multi-service agency consisting of 103 professional staff. The size and diversity of the agency assured a sufficient number of administrative and clinical decision makers and provided suitable variation in the personal attributes and situational factors under study. It also held constant certain organizational factors not included in the path model, such as policy, procedures, and institutional values.

Information on the individual decision-making strategies of the employees of Catholic Charities as well as the predictors identified in this study was gathered by means of a self-administered questionnaire. The questionnaire was designed as a written, self-administered measure

consisting exclusively of forced-choice or rated responses to a series of statements or questions. The questions reflect those situations that each staff perceive to be "most commonly" encountered. It was expected that despite seasonal fluctuations, such as annual budget preparation cycles, that most decision situations are relatively consistent for each functional position (Weissman, 1982).

The categorical items of Gender, Birth Order, and Position called for the respondent to select the applicable label from a list of options. Birth Order contained only two choices, Eldest/Only and Middle/Youngest, based on theoretical similarities. Position was categorized as Administrative and Clinical.

The remaining predictors (Autonomy, Problem Structure, Adequacy of Information, Sufficiency of Time, Sensing, and Thinking) are all continuous score variables and were measured by scales. Degree of autonomy was measured by a subscale of the Edwards Personal Preference Schedule (1959). Problem Structure was captured by a scale adapted from Scarpino's Problem Solving Questionnaire (1978). The other dimensions of decision situations, adequacy of information and sufficient time, were reflected in scales created by the researcher. These decision situation scales were Likert-type scales with ordinal ratings corresponding to items reflecting aspects of each dimension. These scales also carried the qualifier "perceived" because the ratings were subject to respondent perception.

Decision-making strategy was measured by two separate scales: one for information gathering and one for solution selection. These were modified from the Myers-Briggs Type Indicator (Myers, 1962). This forced-choice personality inventory was modified by the researcher to reflect the information gathering behavior of work-related decisions on a scale from high to low degrees of Sensing, or environmental data collection. Solution selection was measured by a similar scale ranging from high to low degrees of Thinking or cognitive analysis.

The original draft of the questionnaire (105 items) was pretested in two community-based agencies: a mental health center, and child welfare agency. The pretest (N=28) served to test scale reliability and refine the questionnaire. An inter-item reliability test revealed the following maximum reliability coefficients following item deletion: Autonomy (.78), Problem Structure (.87), Adequacy of Information (.90), Sufficiency of Time (.83), Sensing (.82), Thinking (.83).

The revised questionnaire was a 97 question survey instrument. It was distributed to the 103 professional staff of Catholic Charities and 87 responses were collected. This group of subjects reflected 23 administrators and 64 direct service workers; 18 males and 69 females; 38 were eldests or only children in their families of origin, and 49 were middle or youngests.

Using this sample of 87 respondents, the path model in Figure 1 was tested through a series of regression analyses. The categorical

variables of Gender, Birth Order, and Position were converted to dummy variables for inclusion in the regression equations. Eldest/Onlys, Males, and Administrators carried a value of 1; Middle/Youngests, Clinicians, and Females carried a value of 0.

RESULTS

Following a series of specified and fully recursive regression analyses, a revised path model was developed that reflected the relationships that proved significant at the .05 level. These are arrayed in Figure 2.

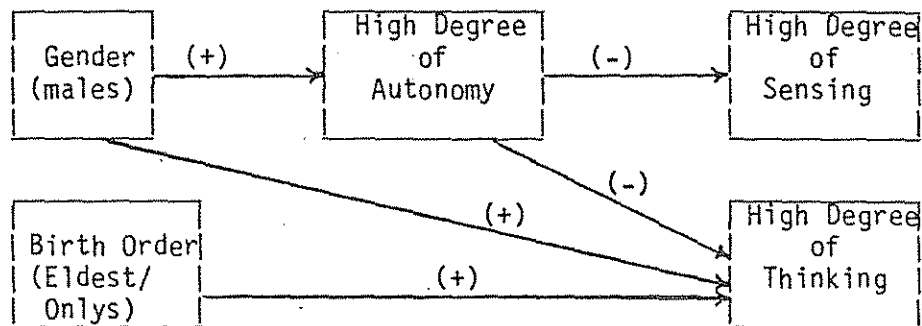


Figure 2: Revised Path Model

This revised model only includes those significant relationships that consequently affected decision-making strategy. Although not displayed in this figure, both Gender and Autonomy were found to relate to Position, in that males and highly autonomous individuals tended to be administrators. However, type of functional position appeared to have no bearing on approach to decision making. Likewise, the decision situation variable of time, information, and structure were all interrelated, but appeared not to influence decision-making strategy.

The concluding reduced model draws a clear distinction between the cluster of personal attributes that retained significance, and eliminated the subset of situational factors. This supports those theorists who suggest that decision making is a function of personal attributes and is not adapted to problem situations or work related functions. The revised model also alters the order of relationships between the set of significant personal attributes and decision-making strategy. It suggests that Birth Order was misplaced in the originally hypothesized model, which proposed an indirect effect on decision making by serving as a predictor of Autonomy and Position. The results indicate that it does not relate to either predictor, but its direct effect on the selection phase of decision making indicates an intervening effect such as socialization that was not accounted for in

the model. In fact, the resulting direct effect of both Gender and Birth Order to Thinking suggests that there may be a single unspecified attribute of both personal traits that has a bearing on method of selection but not information gathering.

The most significant predictor of decision-making strategy in each of the analytic procedures proved to be Autonomy. However, the slope of the relationship was found to be the opposite of that hypothesized.

It was expected that highly autonomous individuals would tend to employ a highly Sensing and highly Thinking strategy. In fact, these individuals evidenced the opposite. This calls into question the conceptual assumptions about individual autonomy. Autonomy was defined in this study as independence from the social-emotional influence of other people. However, one could speculate that personal autonomy leads to an independence from environmental data and a greater reliance on internal inputs. A highly autonomous individual may trust his/her own internal perceptions and judgments more than objective data and cognitive analysis. This type of confidence in one's own intuitive judgments could conceivably lead to the low "Sensing" (intuitive) and low "Thinking" (feeling) strategy of decision making found in this study.

Despite those authors who suggest that different strategies of decision making are appropriate to different decision situations (Finsterbusch and Motz, 1980; Mitroff et al., 1979; Thompson and Tuden, 1959), this study indicates that individuals do not alter their strategy to the structure or relevant information found in varying decision situations. Individual approaches are also not adapted, as Weismann (1982) recommends, to the functions, be they administrative or clinical, performed by social workers.

This may best be explained by Argyris' (1982) interpretation of "espoused theories" and "theories-in-use." Although an employee may learn a decision-making method that is matched to his/her work-related tasks, he/she will, in the long run, rely on an approach that was developed earlier in life and felt to be the most reliable, regardless of the type of problems that are encountered in the work place.

IMPLICATIONS

If effective decision making is rooted in awareness of the process, and matching the right approach to the right type of problem (Scarpino et al. 1983; Weissman, 1982), then the findings of this study should serve as a vehicle for professional self-awareness and training in regard to improved decision making.

The resulting path model reveals that which is observed in an agency setting, but does not preclude the ability to learn adaptive problem-solving styles. The decision-making scales used in this study may provide an instrument by which direct service staff can assess their

own method of information gathering and solution selection in client situations. Staff development exercises can be conducted that use these scales either as Sensing-Intuition and Thinking-Feeling continua, or converted to type categories, as the original MBTI was designed. Staff could then determine if they tend to make subjective judgments when meaningful data are available or whether analysis is employed when in fact the ambiguity of the situation calls for an intuitive judgment. The objective would be to sensitize staff to the strategies they employ, followed by training focused on the application of appropriate strategies to the various kinds of client problems encountered. This training could take the form of mock exercises in which staff would have to articulate and defend the manner in which they approach hypothetical problem situations. They could then be taught to develop different strategies and apply them consciously and appropriately once they are sensitive to the nature of problem situations.

These strategy of decision making scales may also be of use to administrators and board members, particularly when addressing the complex problems of policy making. At this level, when decisions often involve a number of people, a Dialectic decision-making model has been recommended (Drucher, 1974; Mason and Mitroff, 1981; Mitroff et al., 1979; Neugeboren, 1985). This is a group decision-making model utilizing a decision team of varying decision-making styles. In this forum, the underlying assumptions and relevant facts of a problem can be articulated and debated. The objective is to challenge inappropriate assumptions and data, and focus the problem-solving activity on that which is mutually agreed upon in terms of problem definition, relevant data, and criteria for solution selection. The decision-making strategy scales offer a tool for assessing the style of decision makers in the recruitment of a diverse decision team. Mason and Mitroff (1981) have used a modified version of the MBTI for similar purposes. They feel that a team reflecting extremes of Sensing-Intuition and Thinking-Feeling provides a comprehensive range of problem-solving styles.

The results of this study that link attributes to decision making also have implications for the perspective of organizational consultants. Bowen (1982) suggests that many consultants respond to organizational problems by focusing on organizational structures and specific job descriptions. This functional approach often overlooks the interpersonal conflicts that emerge from family of origin and personality, yet have consequences for the functioning of the organization. The results of this study offer consultants the opportunity to investigate such areas as birth order, autonomy, and gender when addressing an organizational problem and shifting the focus away from such factors as position or type of problems encountered. This perspective has been used, to a degree, by Family Systems oriented consultants.

A case in point was a consultation to correct the management problems of a day care center. In this analysis, a conflict between the Board Chairman and Director was traced to their respective birth orders

and how this influenced the responses of each to certain problems. The Chairman, an eldest, tended to overfunction and expected the same assertiveness from the Director, a youngest, who was perceived to be inactive. Part of the conclusion was that job role expectations did not match sibling position traits (Minard, 1976). In a similar study of an inpatient psychiatric unit, staff discontent and high turn over was found to revolve around a head nurse, a youngest in her family of origin, who tended to lack objectivity and relied on an inadequate range of options in making important work decisions (Sobel, 1982).

The most specific research challenge to follow this study would be a similar type of analysis that builds on the relevant results. The statistical analysis of the hypothesized model that guided this study resulted in a revised, but much reduced path model of significant direct and indirect effects. This "trimmed down" model provides a basis for reconstructing and testing a more elaborate set of predictors that would serve the purpose of increasing the explained influence on decision-making strategy. The revised model may also provide a basis for extending the path model by adding other outcomes that may result from certain types of decision-making strategy. In an evaluation study, this outcome may be a measure of the level of effectiveness of a particular strategy given certain types of situations.

However the model is expanded, be it by adding predictors or extending it by additional outcomes, any further testing of the model requires a more generalized sample. The analysis of a more elaborate model on a sample drawn from public and private non-sectarian agencies would provide the opportunity to add organizational factors such as hierarchy and institutional policies and values that would vary from agency to agency. A multi-agency study may also include organizational sanctions for certain types of behavior or styles of decision making, as well as organizational models of decision making, such as consensual versus autocratic decision procedures.

Although decision making is an area of study that has caught the attention of the business community for some time, very little is written on it in human service literature. Given the human consequences of social work decisions, it is an area of research that ought to be as highly regarded by the human service community as by the business sector.

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