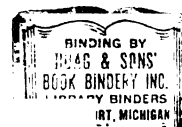


DECISION CLASS, LINKAGE, AND
SEQUENCE IN ONE CENTRAL-SATELLITE
DECISION COMPLEX:
STUDENTS' SUMMER OCCUPATIONAL
CHOICE

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ABSTRACT

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by Nancy McClain Bean

The purpose of this descriptive study was to explore class, and linkage relationships that exist between a central and its complex of satellite decisions, to explore the sequence of satellite decisions crisscrossing among task areas, and to compare the findings with a previous study concerned with the central-satellite decision complex. A central decision is recognized by its generation of several satellite decisions which are made to complete its action. Students' summer occupational choice was considered to be the central decision in the decision complex under study.

Seventy-four Michigan State University students enrolled in HMC 331 courses completed a self-administered questionnaire.

Data analysis of the central-satellite decision complex revolved around three conceptualizations. First, all decisions were classified as strategic, synonymous with central decision, and the satellite decisions as tactical, policy, program, and control. Decision linkage, the second conceptualization, included three components of form, scope,

and range. Forms of decision linkage are divided into series, radial, and compound with further subdivisions in each form except compound. Both class and linkage designations were based on decision content. Lastly, sequence of satellite decisions was viewed in relation to the total central-satellite decision complex.

A decision profile, an adaptation of a Mercator map, was used to diagram the central-satellite decision complex. The strategic decision was placed at the top of the decision profile, and the satellite decisions along with sequence numbers in bands underneath it.

Results indicated that of the 1236 satellite decisions reported by the 74 respondents, 44 percent were classified as tactical, 37 percent program, 17 percent policy, and only one-half of 1 percent control. The mean for all satellite decisions reported by the respondents was 16.7. The variables of age, educational level, students' major, and summer occupation tended to affect the number of satellite decisions.

Seventeen combinations of linkage forms appeared in the decision profiles. The following forms were reported equally by 30 percent of the respondents: 1) single radial and 2) single radial, multiple radial, single series, and multiple series in combination.

Scope was the linkage component used to describe the number of satellite decisions in the bands of the decision profile. Approximately 74 percent of the decisions were in Band #1, 20 percent in Band #2, and 6 percent in Bands #3, 4, and 5.

Range describes the number of bands through which the satellite decisions extended beyond the central decision. About 40 percent of the decisions extended through two bands, while 34 percent extended through three bands. The longest linkage range extended through five bands.

Decision sequence is the chronological ordering of satellite decisions following the central choice. More decisions sequenced #1 or with low sequence numbers were made in the task area of Housing, followed by Transportation, and Clothing. The highest sequence numbers (number assigned to decisions made farthest timewise from the central choice) were in the task areas of On the Job followed by Leisure.

Decision class, linkage and sequence were analyzed in the following areas: 1) Clothing, 2) Housing, 3) Meals and Maintenance, 4) Uses of Earned Income, 5) Transportation, 6) Leisure, 7) On the Job, and 8) Other.

In conclusion, the content of the central decision does affect the satellite decision classes, and decision linkage, and may affect decision sequence in a central-satellite decision complex.

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by

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CHAPTER I

INTRODUCTION AND CONCEPTUAL FRAMEWORK

Introduction

In the world today, we are beginning to recognize that few events just happen. Most events that take place are controlled or influenced to some degree by situational factors, previous decisions and experiences. The additional technological and behavioral knowledge available increases the possibility to predict situations and to keep unanticipated events and consequences at a minimum. Decision-making analysis can make this possibility a reality. Decision-making according to Simon is "finding possible courses of action and choosing among the courses of action" (1:1). The actual course of action chosen is the decision.

Decisions may be viewed in different ways. Some decisions may have the power to stand alone while others rely on previous decisions. Cooper (2) views decisions in an endless stream. He comments:

A single decision is merely a moment in time.
Once it is made and carried out into effect,

it precipitates changes in the environment of the decision. The new problems are created for which new solutions are required. Hence, if you think you have settled things and that you can relax for a while, you are deceiving yourself. The ever-present forces of change compel an endless updating of decisions and actions. New conditions, new experiences and information are always coming up to require the modification of goals, policies, programs or procedures and the creation of new ones. (2:9)

Paolucci (17) viewed some decisions as having an overlapping effect and may be interrelated and interdependent.

The interdependence and/or interrelatedness¹ of these decisions if plotted will structure various patterns.

Patterns are like models or tools, "they allow one to communicate information about a complex, abstract idea in a concrete and efficient manner by providing a logical aid for comprehending, analyzing and predicting the structure and actions of reality" (17:17). It is through the use of structured patterns as a tool that may enable people to visualize, predict and understand the complex decision results of present events.

Structural patterns illustrating the interdependence or linkage of one decision in relation to another are not enough. Decisions are not randomly evolved from previous

¹The terms interrelatedness and interdependence are used synonymous in this thesis.

decisions. However, those decisions which do evolve from a prior decision are linked together by relations among objectives or dimensions of manageability of resources. Alderson (12) believes that another way to deal with decision interdependence is to classify the ties of linkage: a) over time, b) over space, and c) among components of an organization structure. By looking at linkage ties over time and space, the magnitude, far reaching effect, or influences of one decision could be visualized.

Since all decisions are not equal in importance in the problems they handle, effect on present and future courses of action, and in the time required to make them; several researchers have grouped decisions for studying these various relationships. Niles (3) illustrating some elements of importance divided decisions into four groups: 1) routine, 2) minor, 3) major, and 4) critical. Bach (13) supports the concept that there is a continuum of importance with decisions ranging from the very trite through a middle group and on into life's most important decisions. Alderson (12) on the other hand, approaches the decisions militarilistically from the point of two generic categories of strategic and tactical decisions. Later, he further categorizes tactical decisions into three classes of program, policy,

and control. Alderson further states:

. . . the logical sequence moves from strategy to program to policy to controls, but one category is not necessarily disposed of completely before taking up the next The choice of strategy is one of the major factors which sets the framework for other types of decision. But the final test of the strategy is how well it can be implemented. (12:185)

Succintly, Alderson has stated that there is a strategic or critical decision and several lesser decisions made to implement the strategic decision. These strategic-decisions we also might term central decisions and the lesser decisions satellite, which combined together form a decision complex.

Plonk (24) pioneered a study in the field of home management using a central-satellite decision model. She studied one central-satellite decision complex and the content linkage of each decision within the complex. Plonk's results seemed to indicate that decision class and linkage are concepts to be included in managerial decision theory.

Schlater (14) directed application toward the manager stating:

Understanding the relationships between and among decisions can help the manager allocate time to decision-making in accordance with the decision's perceived centrality and can generally place the manager in a better position to predict managerial outcomes. (14:97)

Since Plonk's (24) conceptualization is exploratory in its approach, there is a need for further verification,

clarification, and application of her generalizations and conclusions. This research, in the main, is a replication of Plonk's study to ascertain further generality of her findings. Therefore, the question posed for this study was: How will the decision class and linkage patterns differ from one central-satellite decision complex to another?

Definition of Terms

Decision-maker	- and a respondent are synonymous in this study.
Decision	- is a course of action chosen by a respondent between or among alternatives.
Decision profile	- is a diagram depicting class and content linkage between the central decision and satellite decisions of a respondent.
Decision symbol	- is a code letter which categorizes a decision into its decision class on the decision profile.
Decision class	- is a specific type of decision which has certain identifiable characteristics within a classification system.
Decision linkage	- is the connecting of one decision to another on the basis of decision content. Linkage is described in terms of form, range, and scope.
Decision sequence	- is the chronological ordering of all satellite decisions following a central choice.
Decision task area	- is a content area in which decisions are made.
Occupational choice	- the gainful occupation in which the respondents participated in the summer of 1967 and is also the central decision of study.

Conceptual Framework

The conceptual framework in this study is basically adapted from Plonk's (24) research. She views the organic unity of a central decision as the core of the study and then probes into class and linkage relationships that exist between a central decision and its complex of satellite decisions.

A decision complex is thought to be interrelated through decision classes and linkages. The generic classes of decisions are central and satellite. The specific classes Plonk considered are strategic, tactical, policy, control, and program. Since strategic decision is the only type in the generic class of central decision, the two terms strategic and central decision are synonymous. Once a strategic (central) decision is made, the success or non-success depends on the execution of supplemental or satellite decisions. The satellite decisions complete the action of the strategic decision and consequently are linked to it content wise.

The specific classes of satellite decisions in Plonk's study are: tactical, policy, control, and program. The specific classes of satellite decisions in this study are similar to those Plonk used; however, some classes have been modified. Specifically, a tactical decision was modified from an "instrumental decision made to begin or continue action for the execution of the strategic (central) decision"

(24:6) to a decision which specifies the scale, character and sequence of activities which strategy requires. A program decision was modified from "a decision that results in a new routine for primarily recurring activities in a new situation" (24:7) to a decision that is routine or repetitive for certain course of action. However, if contingency occurs modification of the routine can be made for a short term basis.

Decision Classes

A strategic decision is a key decision which sets the basic pattern of a plan. The strategic decision embodies the core idea concerning the means to an end and often after the decision is made, a reallocation of the decision-maker's resources takes place for an indefinite period of time. A strategic decision is recognized by its generation of several satellite decisions which are made to complete its action. The strategic decision sets boundaries for satellite decisions and in addition may determine a number of non-choice situations or consequences. Summer occupational choice is assumed to be the strategic decision in the decision complex under study.

A tactical decision specifies the scale, character, and sequence of activities which strategy requires. The

tactical embodies the core idea and translates it into an operational plan. However, some degree of flexibility is usually provided for adaption to unforeseen conditions, but it may be a detailed prescription that governs the sequences of responses of activities to complete the strategic decision. Examples of tactical decisions from this study are: selection of a place to live in relation to the location of occupation and selection of appropriate clothing needed for the occupation.

A policy decision specifies a decision rule, or guide indicating how certain situations are to be handled if and when they arise. Basically, when decisions which fall into this category are encountered there is no need to do anything more than apply the rules which have been previously established. Examples of policy decisions are: to save most of earned income for college, who to contact in case of emergencies or if work problems arise, and how to perform certain work tasks.

A control decision regulates, changes simplifies or adjusts a decision in any of the satellite classes. Control decisions either specify or guide the taking of future actions but such decisions are specifically geared toward altering the actions of previously made decisions so as to continue

completing its action in relation to the strategic decision. Examples of control decisions are: typing at a reduced speed in order to make fewer mistakes and taking a packed lunch to work rather than buying lunch.

Program decisions are repetitive and routine to the extent that a definite procedure has been worked out for handling them, thus they need not be treated as novel each time they occur. Program decisions are plans for certain courses of action to be taken regardless of the occurrence of future events. However, if contingency occurs in future events, then decisions are made to follow one course of action if certain events occur, and to undertake other actions if other events take place. Examples of program decisions are: taking a lunch to work and, on occasion when a lunch was not taken, to eat lunch at nearby drugstore; shopping for groceries every Friday evening; and riding the bus to and from work.

Decision Linkage

The content of each decision serves as the basis for linkage analysis. The linkage used to describe decision interdependence contains three components: form, range, and scope.

Form refers to the visual appearance of the linkage among decision symbols on the decision profile. Linkage forms may be divided into three types: series, radial and compound.

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In series linkage one decision follows another in time and in dependence of action. It would be illogical to make Decision #3 until Decision #2 was made and Decision #2 could not be made till Decision #1 was made. Consequently, Decision #3 depends on Decision #2 for setting the course of action, just as Decision #2 depends on Decision #1 to set the course of action. In radial linkage, one decision is made and then subsequent decisions are linked to it but not to each other. Compound linkage is composed of a combination of series and radial decisions linked to the strategic decision.

Range refers to the number of consecutive satellite decisions in a vertical linkage on a decision profile.

Scope refers to the total number of satellite decisions in each horizontal band on a decision profile.

Decision Sequence

Decision sequence is the chronological ordering of all satellite decisions following a central choice. The satellite decision made directly following the central choice is assigned number 1; number assignments continue till the last decision made furthest from the central choice is assigned the highest number. Decision sequence is thought to be the thread which weaves all classes and linked decisions together crisscrossing, intertwining, intermeshing among task areas to fabricate the central-satellite decision complex.

Objectives

The objectives of this study are:

1. To identify and classify the satellite decisions resulting from a central decision, i.e. summer occupational decision.
2. To determine the structure of the linkage between a central and its satellite decisions.
3. To explore by decision sequence the crisscrossing of satellite decisions among task areas.

Assumptions

This study is based on the following assumptions:

1. The student's summer occupational choice is a central decision.
2. The decisions resulting from a central decision can be classified in a decision typology.
3. Decision interdependence based on decision content is an identifiable concept.
4. Decision sequence in no way presumes to measure decision importance or magnitude.

CHAPTER II

REVIEW OF LITERATURE

This research investigated decision interrelatedness by examining decision class, linkage, and sequence in a central-satellite decision complex; hence, the review of literature was limited to decision classification, and interrelatedness. There is relatively little research concerning decision sequence.

Decision Classification

Richards and Greenlaw (5) have suggested the decision classification of deterministic and stochastic which is commonly used in game theory and computers.

In a deterministic relationship, the value of the dependent variable is absolutely determined by the values of the other variables in the relation. Such relationships maybe linear or curvilinear or step or kinked . . . depending upon just what relations management is attempting to utilize or simulate.

A relation among two or more variables is classed as stochastic, if at least one of the variables assumes multiple values, the frequency of occurrence of which may be described by a probability distribution.(5:511)

Using this decision classification the characteristics of the classes hinge on the values attached to the variables in the relationships. The problems with this classification in the area of home management are: 1) how to determine all values for each variable in the relationships, and 2) how to measure the importance or degree of priority in which one value is held over another value in relation to one variable or several variables. Though this classification does not appear feasible for home or family management in practice, it has lent itself to the development of the mathematical concept of game theory.

Game theory has had a great impact on the study of decisions which can simulate real life. Game theory in its present stage of development functions well in the area of business, but appears unsuitable for use in family management decision. Johnson and Kobler (15) in working with game theory have found that the "human decision system is incompletely defined and the parameter varies from one decision to another in ways so subtle as to elude identification" (15:878).

The same decision classification that is used in game theory may be used by the computer. The computer can be programmed to make decisions either deterministic or

stochastic in nature, and then man is to focus and utilize the computer's final decision. However, as Hunt points out:

We view the decision-making in a complex organization (business) as emerging from a continuing social process composed of small acts and carried out by different people at divergent points in time. We reject the notion that one specific decision can be made the focus of analysis.
(16:88)

Hunt has just refuted the use or overdependence of relying on the computer to make the decision. He puts an emphasis on the small decisions that take place at different points in time, and besides, even if a computer is utilized to help make decisions, someone had to make some decisions about the information to be fed into the computer.

No matter what the probabilities are of the values of variables, the statistics, computer, and game theory can not completely define all the parameters of the human decision system, thus confining this classification only to simulation of life.

Various authors such as Gore, Katona, and Simon view decisions with a polarity approach.

Gore (6) sees decisions classified as adoptive and innovative. He describes an adoptive decision as one

. . . for which there is general agreement on goals and general acceptance of a pattern of activities appropriate to achieving them, but for which there is a need to adjust

activity in order to raise the level of goal achievement to an acceptable point. (6:184)

He further states that the innovative decision is:

. . . a relatively infrequently used class of decision which has its object the substitution of one goal for another Since it typically involves uncomfortable changes in status, role, and other patterns of activity, the innovative decision is a stressful experience. (6:185)

Gore seems to place great emphasis on the sociological aspects of the decision-maker and defines his classifications according to the degree of conformity and the price on non-conformity to achieve the decision-maker's goal.

Katona (11) describes decisions as genuine and habitual or routine. A routine decision describes actions developed into habits through repetition. While genuine decisions "lead to responding to a situation in a new way" (11:49).

Simon's (1) programmed and non-programmed decisions are similar to Katona's routine and genuine but further elaborated. Simon states:

Decisions are programmed to the extent that they are repetitive and routine, to the extent that a definite procedure has been worked out for handling them so that they don't have to be treated de-novo each time they occur. (1:5)

Decisions are non-programmed to the extent that they are novel, unstructured, and

consequential. There is no cut-and-dried, method for handling the problem because it hasn't arisen before, or because it is so important that it deserves a custom-tailored treatment. (1:6)

Later Delbecq (18) identified three classes of decisions: routine, creative, and negotiated. He defines routine decision-making in Simon's (1) terminology of "Programmed" and in Thompson's (7) terminology of "Computational." "Here agreement of the desired goal is reached, and technologies exist to achieve the goal" (18:332). The creative decision in Simon's (1) terminology is "heuristic" and Thompson's (7) terminology is "judgemental."

The central element in the decision-making is the lack of an agreed upon method of dealing with the problem; this lack of certitude may relate to incomplete knowledge of causation, or lack of an appropriate solution or strategy. (18:334)

Lastly, negotiated decision-making is:

. . . concerned with a strategy for dealing with opposing factions which because of differences in norms, values or vested interests, stand in opposition to each other, concerning either ends, or means or both. (18:336)

Even though Delbecq's classification deals with decision-making in business organization, with slight modification, there are potential applications for home management. A substitution of the term "family" for "organization" in Delbecq's following statement gives it meaning for home

management.

In a real sense management of the decision-making process is management of the structure and functioning of decision groups, so that these decision-making processes become congruent with changes in the nature of the decision-making task being undertaken at a particular point of time within the organization. (18:339)

↘ Bach (13) approaches decision classification by viewing the degree of rationality in decisioning. Bach outlines three models of decision-making: rational, irrational, and non-rational. In rational decision-making, the optimal alternative is selected from the basis of complete knowledge of all other alternatives. Irrational decision-making focuses on the "psychodynamic structure" of the person and not on the situation. Non-rational decision-making applies to situations where insufficient knowledge or facts are known, the results are irrevocable and the opportunity will not repeat itself. (13:17)

Diesing (8) describes decision-making by types of rationality rather than degrees of rationality as Bach did. The five types of decision-making are: technical rationality, economic rationality, social rationality, legal rationality, and political rationality. He describes each type as follows: Technical rationality appears in actions which are undertaken for the sake of achieving a given end. When

the actions are repeated they may become standardized and turn into techniques (8:9). Economical rationality appears in the allocation of alternative ends, scarcity, common means and media of value measurement; as well as the exchange of plurality of units and different ranking of values among the units (8:18). Social rationality appears in the involvement of two or more people. It is the integration developed through a selective process in which both the individual and the social systems try to reduce conflicts and tensions within roles and between roles (8:77). Legal rationality includes those decisions where rules are used as guides and are applied to situations. Political rationality relates to the decision-making structure (8:70).

In his earlier work Diesing (19) defined only two categories of decision: economic and non-economic. The premise for economic decision-making was to optimize satisfactions while the non-economic decision-making was based on problem solutions characterized by cultural value conflicts as well as mis-handling the problems.

Diesing (20) then followed the article on economic and non-economic decisions with an article on socioeconomic decisions. Succintly, socioeconomic is a combination of economic and non-economic decisions with the underlying basis on "important goals and important elements of internal

conflict" (20:6).

Bymer (28) discusses the decision classification of social and economic. These two broad categories have some characteristics of Diesing's economic, non-economic, and socioeconomic decision-making. Family decisions are quite often grouped by social and economic decisions and are discussed as if they were separate. (Social decisions according to Bymer, are concerned with major turning points in family development, while economic decisions are concerned with the uses of resources (in the main, financial resources). Bymer feels that family decisions cannot be segregated into social and economic categories. She states:

The so-called turning point decisions, whether or not to move to another city, to undertake a business of one's own, to get out of independent farming and become a wage earner may be social decisions but they are also economic. These are decisions and once made, these decisions in turn provide restraints and direction for a multitude of smaller decisions that follow. Family decisions are not economic or social. They are economic and social. (28:3)

Richards and Greenlaw, and Alderson from the area of business management, each have an approach to decision classification with slight variations and many common components. Richards and Greenlaw (5) have two generic classes of planning and controlling. They state:

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Planning is any information output from a substantive decision transformation which either specifies or guides the taking of future actions . . . is geared toward overcoming existing or anticipated problems. (5:293)

The class of planning decisions has been divided into two groups: programming and repetitiveness. Programming refers to plans for certain courses of action to be taken regardless of the occurrence of future events (5:304). Repetitiveness refers to standing plans or policies, broad generalized planning imperatives (5:312). Richards and Greenlaw view controlling decisions as "subsets" of planning decisions.

Control decisions either specify or guide the taking of future action but such decisions are specifically geared toward correcting deviations in systems performance from established standards. (5:319)

Alderson (12) similarly views decision in two generic classes; however, he has borrowed his terminology from the military and they are: strategic and tactical. The strategy is a key decision which sets the basic pattern of a plan (12: 184). The tactical decisions then execute the basic plan of the strategy. Alderson further delineates tactical decisions as: program which specifies the scale, character, and sequence of activities which strategy requires; policy decisions are rules or guides indicating how certain situations are to be handled if and when they arise; and control makes

adjustments or changes in the existing pattern of behavior (12:185).

Morris' (9) rebellion against "taking categorization to mean the strategy of coding out perception so that things one could distinguish as different are made equivalent" (9:168), has used categories and made refinements on various definitions in the management field. Morris' definition of policy lends substantial support to Alderson's (12) position. As Morris states:

When decisions which fall into X are encountered there is no need to do anything more than apply the rules which have been established for this category. (9:169)

Alderson views the four classes (strategic, program, policy, and control) as constituting the substance of planning. Alderson further states:

The logical sequence moves from strategy to program to policy to controls, but one category is not necessarily disposed of completely before taking up the next. . . . The choice of strategy is one of the major factors which set the framework for the other types of decisions. But the final test of strategy is how well it can be implemented in the other three decision areas. (12:185)

Alderson's apparent view of the relationship between the four classes of decision seems to reinforce Halliday's view. Halliday (26) in her research distinguished between the "crucial" central decisions through the family's lifetime,

and the small "day-to-day" decisions which implement the larger crucial ones. Gross and Crandall (10) also give support and state: ". . . there are large and small decisions. The larger the decision the more it will affect future decisions" (10:73).

Paolucci (17) separated decisions into the generic classes of central and satellite decisions. Central decisions, as Paolucci describes, consist of key or significant choices. They control the situation, and set the limits in number and kinds of choices one will make in the future. Because of its extensive effect, the central decision should be made in the most conscientious and rational manner possible. Paolucci further describes, satellite decisions as dependent on the central decision. These decisions, in fact, complete the action of the central decision and in doing so bear directly on the success or non-success of the central decision. (17:17)

Decision Interrelatedness

A decision complex is thought to be interrelated through decision class and linkage. The linkage or connecting element of one decision to another is an approach to studying sequence and/or interdependence of decision.

Cooper states:

The single decision must be woven into a larger complex of activity, to assure

continued balance and consistency in the over all scheme of things. Usually this starts a chain reaction of judgments and decisions on related matters. (2:9)

Continuing, Gore states:

Initially fabricated through decisions, a pattern is often the product of a series of decisions. A simple pattern embodies a sequence of acts. A complicated pattern includes contingent sequences allowing for the accommodation of conditions not anticipated as the expected conditions of responses. (6:115)

Cooper also visualizes "when broad decisions are made, a pyramiding reaction sets in for subsidiary decisions of all kinds must then be made" (2:9).

There are, obviously, no set patterns to illustrate decision interdependence; however, some authors have projected some suggestions.

Gore (6) defines sequence as a chain or "series of choices, each related to each other, each one built on the last, the whole providing a base for action" (6:186).

Paolucci (17) visualizes a chain or series pattern which is characterized by a straight line and necessitates sequential dependence of one decision upon another. She also feels that time and space considerations are essential in sequential choice. She states:

Each decision in the chain pattern is directly

dependent upon the preceding choice. Although the chain can start or stop at any one point, single choices are dependent on preceding decisions. (17:17)

Lancaster (25) relates a chain of decisions not only indicates a sequential dependence of decisions but also may connote some direction.

Plonk (24) views the generation of satellite decisions from the central decision basically as "radii" or spokes from the hub of a wheel. Lancaster (25) visualizes a 'decision web' schema. She states:

The concept of 'decision web' indicates the interdependence of decisions, but does not seem to show direction as the chain tends to do. Because decisions seem to mesh and cross and relate, perhaps a conceptual model of a web of decisions in a spiral would be helpful. (25:8)

Here we have considered patterns as a product of decisions. Gore (6) feels that there may be merit in viewing patterns and decisions as reciprocals instead of as cause and effects. He comments further:

Certainly a pattern is the product of a series of choices. However, because patterns seldom produce only the results anticipated, decisions to adjust patterns until they more nearly realize expectations are both desirable and inevitable. (6:115)

Authors of home management literature have suggested that decision interrelatedness is an important managerial

concept.

Schlater and Vincent define management as:

. . . a dynamic, on-going process which encompasses those human actions directed toward the realization of values and goals; the prime feature of such goal-directed activities is the systematic series of actions which constitute the making and implementing of interrelated decisions under conditions of uncertainty and limited resources. (14:97)

To extrapolate, "making and implementing of interrelated decisions" seems to be the key idea of management.

Paolucci states: "Management in the home is viewed as a series of interrelated and interdependent decisions. No managerial decision stands alone" (17:17). She further states, "A successful decision leads only momentarily to the end of decision-making, rather, choice is followed by choice in a seemingly endless process" (22:4).

Knoll (23) expresses that decision-makers are influenced by decisions previously made and by anticipated future demands. This relates the far reaching effect of one decision upon another. Knoll relates:

We may be less inclined in the future to plot all decisions, great and small, on the same map. In the past, home management had tended at best to focus on decisions within the middle range of importance. Perhaps we have shortened our sights in home management in our attempts to use day-to-day illustrations and to be realistic. It may be that

we have not adequately visualized the complexities of one situation as compared with the complexities of another. (23:336)

The complexities in visualizing decision interrelatedness is not a problem unique to the field of home management but it does require a special type of perception. Cooper (2) states this problem eloquently:

The ability to see events and phenomena in a time relationship, reaching back to the past, progressing through the present and extending into the future, may be called sequential perception. This is the essence of understanding cause-and-effect relationships. The ability to think through the passage of time is basic to planning and programming. After all, a decision is merely a moment in time. It is consummated through an action which brings about reaction followed by some kind of interreaction and counter action. In order to pierce through the veil of uncertainty, the decision-maker must be able to perceive the probable responses to actions. (6:208)

Decision Class and Interrelatedness Research in Home Management

To date there have been three researches pursuing decision class and interrelatedness.

Plonk (24) in 1964 pioneered in the study of decision complexes and conceptualized an approach for examining class and linkage relationships that exist between a central and its complex of satellite decisions. She applied her framework to a discrete sample of decisions concerning retirement

housing. Assuming the retirement housing choice was a central or strategic decision, she classified 1,325 decisions reported in her data in this manner: tactical, 59 percent; policy, 22 percent; program, 11 percent; and control, 8 percent.

After plotting all respondent's decisions on profiles, she analyzed the interdependence of decisions by form, scope, and range. Form referred to the visual appearance of the linkage interdependence between decisions. The analysis showed 90 percent were single radii linkages, plus 17 other combinations of linkage forms appeared. Scope refers to the number of decisions in each band. Analysis showed 86 percent of the satellite decisions in Band 1 (made directly following the central decision), 11 percent in Band 2 and 3 percent in Bands 3, 4, and 5. Range described the number of bands through which satellite decisions were linked to the central decision. On one-half the respondents profiles, decisions extended through two bands, on one-third of the profiles through three bands, and the longest range was five bands.

Lancaster (25) in 1966 studied decisions made by non-college educated homemakers. Diesing's (20) categories of social and economic decisions were used for decision classification in her study. She found 17 of the 35 decisions could be classified as social, 6 decisions as economic

and 9 decisions as a combination of social and economic factors. Even though three decisions were classified as neither social nor economic, it might be inferred that social or economic factors were involved although the homemaker when interviewed did not verbalize them. Lancaster also found six decisions revealed a relationship between decisions. Two of these seemed to have a central-satellite type of linkage and the other four appeared to be of the chain type where decision follows decision. In the present study, these two types of linkage are not considered as separate, but central-satellite is viewed as a decision structural model and series is one of the linkage forms within this model.

Myers (27) objective in 1967 was to investigate the class, interrelatedness and management areas of satellite decisions ensuing from the central decision of wives to seek full-time employment. The 763 reported satellite decisions were classed as tactical, 22 percent; policy, 40 percent; control, 25 percent; and program, 13 percent, and placed in management areas of participation in community and social activities, 11 percent; and administering to personal and family well-being, 22 percent. Analysis of decision profiles (one for each respondent) illustrated decisions linked to the central decision through single linkage (54 percent), 2 linkages (35 percent), 3 linkages (8 percent), 4 linkages

(2 percent) and more than 4 linkages (1 percent). The longest decision chain linked nine satellite decisions and extended through nine linkages. Myers only discusses linkage forms in terms of chains or clusters. Chain linkage is equivalent to series linkage in the present study.

CHAPTER III

METHODOLOGY

This exploratory and descriptive study was partially a replication of a previous study (24) concerned with a central-satellite decision complex. The difference between the two studies were in the particular central decision chosen for study, the group of respondents, and in part the instrument. This chapter describes the selection of the sample, the development of the instrument, the collection of the data and the procedures used to analyze the data.

Selection of Central Decision

Selection of the central decision for this study was crucial in that whatever decision was chosen, by definition must evolve several lesser decisions. The central decision, student's summer occupational choice, was chosen on the basis that it would evolve satellite decisions and that it was common to the total sample. Most college students every summer have an opportunity to choose how they wish to spend their time until they return to college in the fall. For many it may be continuing college studies, others traveling,

and some seeking employment. For those students who seek employment, various occupational opportunities are open to them. These opportunities may be a fore-runner to a life time career, or a means of earning money to continue their college education; the opportunities may be of short duration allowing the student to return to college in the fall, or the type allowing a student to work part time and attend college part time. The decisions students made to carry out their summer occupational choice provide the data for this study.

Selection of Sample

The sample consisted of Michigan State University students enrolled Fall Term, 1967 in the Home Management and Child Development course 331 (hereafter referred to as HMC 331) "Management and Decision-Making in the Family." This junior level course, concerned with decision-making theory, discusses the concept of central-satellite decision complexes as part of the course content.

The sample was restricted to women on the basis that only one male was taking the course in the two sections offered.

A further requirement of the sample was that they must be gainfully employed rather than continuing their academic studies or traveling. It was felt that the latter two pursuits

would elicit satellite decisions, but were eliminated on the basis that they would broaden and complicate the decision task areas as well as possibly call for separate analysis.

The Instrument

A self-administered questionnaire was constructed for collecting data (Appendix A). The three parts comprising the questionnaire were: 1) questions asking for demographic information, their summer occupational choice, and reasons for selecting this particular occupation; 2) open-ended questions for listing decisions made as consequences of the occupational choice in relation to various decision task areas; and 3) numerical sequencing of all the decisions made in the decision task areas. The first decision made following the central decision was assigned #1 and the other satellite decisions were numbered consecutively.

The questionnaire provided one column for students to record their decisions. Two other columns were provided, one for the student to sequence her own decisions, and another for coding the decisions by the researcher.

During Spring Term, 1967 the questionnaire was pre-tested. Six students enrolled in the HMC 331 course took the questionnaire to determine its useability.

The pretest were examined and analyzed to note format

changes, ambiguity in questions, instructional content, and feasibility of analysis. The questionnaire in its original form was found satisfactory with minor alterations. The pretest data when coded and analyzed did indicate the feasibility and useability of the questionnaire.

Collection of Data

The data were collected by administering the questionnaire in two regularly scheduled HMC 331 classes on November 14, 1967. The first portion of each class was given to lecture on the concept of central-satellite decision complexes. The students were then given the questionnaire to complete. Prior to completing the questionnaire verbal instructions were given (Appendix A). The length of time for questionnaire completion varied from twenty minutes to forty-five minutes.

Analysis of Data

The data were analyzed in the following ways:

1. The conceptual framework was used to classify each decision in their respective class.
2. A decision profile, plotting decision class and linkage, was constructed for the decision complex of each respondent. (Appendix B contains a selected representation of decision profiles, the criteria used for profile selection, and respondent's number indexing the selected profiles.)

3. The numerical sequencing of all the decisions was employed to explore the crisscross patterning of decisions among the various task areas.
4. A comparative analysis was made between results from this study and those from the Plonk (24) research.

Decision Class

The decisions reported by each respondent were classified by the decision typology previously defined in the conceptual framework. Each decision class was given codes T, P, C, R for tactical, policy, control, and program decisions, respectively.

Decision Profile

Following the typing of each decision, a decision profile was constructed for each respondent. In form, the profile was a modified mercator map.

The mercator map (Figure 3.1) basically is composed of one large circle near the top and center of the page. This circle represents the central or strategic decision. Below the circle are several horizontal lines which form bands. From the central decision various satellite decisions radiate like spokes of a wheel. The satellite decisions in the first band must be made before a decision can be made in the second band. The decision in the second band cannot be made until the decision in the first band has been made.

Thus each decision located in bands two, three, four, five, etc. must be attached to a decision in the preceeding band. The vertical lines perpendicular to the bands form columns which contain a label of a decision task area. These are the content areas in which various decisions were made.

The typed decisions were plotted on the map by using the following criteria: 1) each typed decision was placed in predetermined groups called decision task areas, 2) each typed decision in each decision task area was placed in a band showing some relationship to every other decision in that area, 3) lines are drawn between and among those decisions which have direct dependence on the previous decision to form linkage patterns, 4) combined together the typed decisions and the linkage patterns produced a decision profile.

Decision Linkage

For describing decision interdependence or the connecting links joining decisions the following three constructs were employed: form, scope and range.

Form refers to the visual appearance of the decision symbols on the decision profile. The various patterns produced by linking one decision to others may either form a chain or series with one decision followed by a decision in the subsequent band or the pattern may radiate out like spokes on a wheel with one decision in one band and several

(two or more) decisions in the subsequent band relating back to one decision. When two or more radii appear in the same band attached to either the strategic or another satellite decision, the decisions represented are not necessarily time ordered within the band. However, a decision attached in a subsequent band to a decision in the preceding band follows sequentially in action and time order and forms a chain or series of decisions. From the linkage patterns or form one can identify various variations of series and radial patterns as well as combine these two forms together to construct a compound pattern or form.

Series Linkage:

In series linkage Single Class Series has two or more decisions in the same typology class. Each decision is located in a separate band on the decision profile, to form when linked together, a chain or straight line. Multiple Class Series is composed of two or more decisions from different typology classes; each decision is in a separated band and linked together forms a chain on the decision profile.

Radial Linkage:

In radial linkage Single radial represents one decision located in Band 1 which is attached and radiates out from the central decision. Multiple Radial has at least two

decisions in Band 2 linked to one decision in Band 1 and may or may not have radial linkages in subsequent bands. Inverted Multiple Radial has one decision in Band 2 attached to two or more decisions in Band 1 and has either no decisions in Band 3 or is followed by single or multiple radial linkage forms. Multiplex Radial has two or more forms of radial linkage in Band 2 and may have a single radial form in Band 2 or 3.

Compound Linkage:

A compound form is composed of a combination of series and radial linkages.

Scope refers to the total number of decisions within a single band on the decision profile. For example, a decision profile may have 11 decisions in Band 1, 9 decisions in Band 2, 3 decisions in Band 3 and 1 decision in Band 4.

Range refers to the number of bands through which a linkage passes. A single radial linkage will have a range of one band whereas a series decision may have a range of 5 or 6 bands.

Decision Task

Prior to developing the questionnaire, the researcher talked with various students about decisions made concerning a summer occupation. Following the discussions, the researcher noted general content areas in which most of the

decisions were made. The researcher derived the following seven content categories and added the eighth as a residual category: 1) Clothing, 2) Housing, 3) Meals and Other Maintenance, 4) Uses of Earned Income, 5) Transportation, 6) Leisure, 7) On the Job decisions, and 8) Other decisions.

Clothing included decisions such as appropriateness of present wardrobe to occupational needs, purchasing of new clothing and uniforms. The category of Housing covered decisions regarding where to live, location in relation to the summer occupation, and living expenses. The area of Meals and Maintenance included those decisions of whether or not to eat lunch, provision for lunch, the amount of money to spend on food, and who would prepare the food. The category of Uses of Earned Income included decisions relative to allocation of income and yet save a "substantial" amount or most for college. Decisions made in the task area of Transportation included how to get to and from work, the expense of commuting to and from work as well as vacation, and the problems of finding rides to work. Decisions made concerning Leisure included participation in activities on days off and evenings as well as time left for vacation and travel. The category of On the Job decisions included how to organize one's work, how to do the work, rate of

completing tasks, how to discipline children, and what to do if problems arise. The final category of Other decisions included whether to continue working in the fall or quit working and return to college and did the occupation meet previously established expectations.

To illustrate the decisions by class and number for each task, the decision profile was divided into eight sections, one for each task area. On the profile each vertical column represents one task and is labeled below Band 5.

Decision Sequence

Each respondent was asked in the questionnaire to chronologically order the decisions made following the central choice. The first decision made after the central choice was assigned a number one, the second decision number two and so on. The last number given to a decision was the one made furthest, timewise, from the central choice. In some questionnaires, the respondents failed to sequence the recorded decisions; therefore these data could not be rated in respect to decision sequence.

On the decision profile the number following the decision symbol is the sequence number of that decision. Decision profiles of respondents numbered 46 to 74 did not

have decision sequence; therefore, the researcher numbered the decisions within task areas in order reported.

In a few situations, a respondent failed to record a decision, but indicated that one had been made by the nature of a recorded decision which could only follow a preceeding decision. To give continuity to the profile and sequence an X type decision was added to indicate a decision made but not reported on the questionnaire.

A modified cross-tabulation chart was constructed to explore the crisscrossing and intermeshing of sequenced decisions among the task areas. Sequenced decisions were placed into cells in relation to the task area the decision was made and the task area of the preceeding decision. The various sequence numbers in each cell are the keys used to explore and determine the crisscrossing of decisions and among task areas following the central choice.

Reliability of Data Analysis

In an attempt to reduce possible bias and error, an independent coder was given the data with the original decision classification definitions from Plonk's (24) research and asked to categorize the decisions. After classification, the researcher and coder compared their categorization of decisions on all the questionnaires. A

lack of agreement in the classification analysis indicated the need for greater clarification of the decision classes.

Clarification of the decision classification resulted from further examination of the decision classification and analysis of coder and researcher classification differences. By using a modified decision classification, all decisions were recorded by both researcher and coder and agreement of classification was reached for all decisions.

To check the linkage patterns, the independent coder checked every decision profile for diagramming of linkage forms.

CHAPTER IV

DESCRIPTION OF THE SAMPLE

A description of the 74 women students includes: age, marital status, education, students' major college, students' major, income sources for educational expenses, and summer occupation.

Age and Marital Status

The vast majority of the respondents were 20 or 21 years old, 58 percent and 24 percent, respectively (Table 4.1). Over 90 percent of the students were single, while 1 percent were divorced and the rest were married. Succinctly, the mode of the sample is 20 years old and single.

Table 4.1 - Marital Status by Age

Marital Status	Age						Total Number	Total Percent
	19	20	21	22	24	Over 25		
Single	8	43	16	1			68	92
Married			2		1	2	5	7
Divorced						1	1	1
Total Number	8	43	18	1	1	3	74	
Total Percent	11	58	24	1	1	4		100

Educational Level

Of the 74 students responding, 70 percent of them were in the third year of college, 22 percent were in the fourth year of college, and the remainder were in the second year of college.

Students' Major College

Ninety-five percent of the students had majors in the College of Home Economics, one student had declared no preference and the following four colleges each had one representative: Arts and Letters, Communication Arts, Justin Morrill, and Social Science.

Students' Major

Six of the 74 students did not report a college major. Of the remaining 68 students, over one-third of the students had chosen Home Economics Education as a major (Table 4.2). A little less than one-fifth of the students were Interior Design majors and about one-sixth of the students were Retailing majors. The following majors in the College of Home Economics each had a small representation: Child Development and Teaching, Dietetics, General Clothing and Textiles, and Foods, Non-Home Economics majors represented were Art Education, Sociology, Social Work, and

Speech Therapy.

Table 4.2 - Students' Major

Major	Total Number	Total Percent
Home Economics Education	25	34
Retailing, Clothing and Textiles	9	12
Interior Design	13	18
Child Development and Teaching	6	8
General Home Economics	1	1
Dietetics	4	5
General Clothing and Textiles	4	5
Foods	2	3
Art Education	1	1
Sociology	1	1
Social Work	1	1
Speech Therapy	1	1
Not Reporting	6	8
Total Number	74	99 ^a

^aDoes not total 100 percent due to rounding.

Students' Income Source for
Educational Expenses

Seventy-three of the 74 students reported source of income for their education (Table 4.3). Over 40 percent of the students had sole parental support for their education, and all of these students were single. About 14 percent of the students (all single) had a combination of self support

and parental support for their education. The remaining students represented various combinations of the following income sources: 1) self-support, 2) parental support, 3) scholarships and grants, and 4) other.

Table 4.3 - Students' Income Source for Education Expenses

Income Source	Total Number	Total Percent
(1) Self-Supported	8	11
(2) Parental Support	31	42
(3) Scholarship and Grants		
(4) Other	3	4
Combination 1 and 2	10	14
Combination 1, 2, and 3	5	7
Combination 1, 2, and 4	3	4
Combination 1 and 3	5	7
Other Combinations	8	11
Not Reported	1	1
Total Number	74	101 ^a

^aDoes not equal 100 percent due to rounding.

Students' Summer Occupation

Eight of the 74 students held 2 summer jobs; these are counted separately and therefore total 82 occupations (Table 4.4). The Dictionary of Occupational Titles (4) was used for categorization; 48 percent of the students (all single) were engaged in Service occupations, while 40

percent of the students including both married and single were engaged in Clerical and Sales occupations.

Table 4.4 - Students' 1967 Summer Occupation

Occupation ^a	Total Number	Total Percent
Professional, Technical, and Managerial	3	4
Clerical and Sales	33	40
Service	39	48
Farming, Fishery, and Forestry	4	5
Benchwork	2	2
Miscellaneous	1	1
Total Number	82	100

^aSome students held more than one job; both are recorded.

Occupational Experience Prior to 1967's
Summer Occupation

Fifty-four percent of the 74 students had previous experience at their summer's occupation prior to working in the summer of 1967 (Table 4.5). The remaining 46 percent had no previous experience in their 1967 summer occupation.

Students' State of Employment in
Fall 1967

Of the 74 students, 83 percent of them terminated their summer occupation prior to the start of the university's fall term, while the remaining students continued

working at their summer occupations (Table 4.6).

Table 4.5 - Occupational Experience for 1967 Summer Occupation

Occupation	Previous Experience	No Previous Experience
Professional, Technical, & Managerial	1	2
Clerical and Sales	17	16
Service	20	19
Farming, Fishery, and Forestry	3	1
Benchwork	2	
Miscellaneous	1	
Total Number	44	38
Total Percent	54	46

Table 4.6 - Students' State of Employment in Fall 1967

Occupation	Continued Employment	Dis-continued Employment
Professional, Technical, & Managerial		3
Clerical and Sales	8	25
Services	6	33
Farming, Fishery, and Forestry		4
Benchwork		2
Miscellaneous		1
Total Number	14	68
Total Percent	17	83

Length of Time Employed in Summer Occupation

Forty-six of the 74 students worked 1-5 months at their summer occupation, while 16 percent of the students worked 6-10 weeks or about 1 1/2-2 1/2 months (Table 4.7). About 12 percent of the students merely checked whether they had worked months or years and the remaining 25 percent of the students represented various numbers of weeks, months, and years of work at their summer occupation.

Geographic Location of Summer Occupation

Sixty-seven of the 74 students held summer occupations in the state of Michigan (Table 4.8). Three students did not cite a city but mentioned the state. Forty percent of the students who worked in Michigan lived in cities ranging in population size of 10,001-50,000. Nineteen percent of the students worked in cities ranging in population size of 100,001-500,000.

Of those seven students who lived and worked outside the state of Michigan, five lived in cities ranging in population of 1,001-5,000. The six states represented were California, Illinois, Indiana, Massachusetts, New Jersey, and Wisconsin.

Table 4.7 - Occupation by Length of Time Employed

Occupation	Weeks				Months			Years				
	1-5	6-10	11-15	16-20	1-5	6-10	11-15	X ^a	1-2	3-5	6-10	X ^a
Professional, Technical, and Managerial		2						1	2			
Clerical and Sales		5	2	1	15	2		3	1	1	1	2
Service		5	2	1	21	3	1	4		1		
Farming, Fishery, and Forestry	1		1	1	1							
Benchwork					1				1			
Miscellaneous		1										
Total Number	1	13	5	3	38	5	1	8	4	1	1	2
Total Percent	1	16	6	4	46	6	1	10	5	1	1	2 ^b

^aStudents checked months or years without specification of number.

^bDoes not equal 100 percent due to rounding.

Table 4.8 - Occupation by Location in Michigan

Occupation	Population									
	Below 1,000	1,001 5,000	5,001 10,000	10,001 50,000	50,001 100,000	100,001 500,000	500,001 1,000,000	1,000,000 5,000,000	No Res- ponse	
Managerial, Technical, and Professional				2					1	
Clerical and Sales			2	11	6	8	4	1		
Service	1	2	2	14	4	6	3	1		51
Farming, Fishery, and Forestry	1	1		2						
Benchwork		1		1						
Miscellaneous			1							
Total Number	2	4	5	30	10	14	7	3		
Total Percent	2	5	7	40	13	19	9	4 ^a		

^a Does not equal 100 percent due to rounding.

Rank Ordered Reasons for the 1967 Summer
Occupational Choice

The students gave a total of 337 reasons to justify their choice of summer occupation. The reasons are categorized and ranked in Table 4.9. A mean of 4.5 was computed for all the reasons reported by all the respondents.

The category of personal needs received the highest number of reasons or 30 percent of the total. The two categories of working conditions and financial were second and third in total number of reasons with 18 and 17 percent, respectively. The category of free time and social life had the least number of total reasons.

Analysis of the rank ordered reasons shows that the majority of students gave a reason of personal needs within the first five reasons stated, a financial reason within the first three reasons stated, and a reason concerning the availability of jobs within the first two reasons stated. Whereas, the majority of students gave reasons for working conditions between the second and fourth reasons listed. A reason concerning job location or free time and social life most often occurred as the fourth or fifth reason stated.

Table 4.9 - Rank Ordered Reasons for 1967 Summer Occupation

Reason	1	2	3	4	5	6	7	8	9	10	Total Number	Total Percent
PERSONAL NEEDS												
1. Self Esteem	4	4	1	1		2						
2. Experience for Major	10	3	3	4	2		1					
3. Learning Experience		1	5	1	2		1	1				
4. Interest in Work	3	3	6		5	1						
5. Meet People and Work with Children	3	3	3		1				1			
6. Constructive Use of Time				2	1				1			
7. Do Something Different	3	1	1	1	1							
8. Own Boss				1		1						
9. Opportunity to Live Some Other Place than Home or in Michigan	1	3	1	5	1	1						
Sub Total	24	18	20	15	13	5	2	1	2		100	30
WORKING CONDITIONS												
1. Liked Working Conditions	1	4	3	1			1					
2. Employer - Employee Relationship	3	4	2	2	3	2	2		1			
3. Side Benefits			1	2	1		1	1		1		
4. Future Reference				1		1			1			
5. Work Hours	2	4	8	4	3		1	1				
Sub Total	6	12	14	10	7	3	4	2	2	1	61	18

Table 4.9 - Continued

Reason	1	2	3	4	5	6	7	8	9	10	Total Number	Total Percent
FINANCIAL												
1. Earn Money for College	8	3	1		1							
2. Earn Money for Other Reasons	3	2	3	3								
3. High-Good-Adequate Pay	7	8	6	5	2	5						
Sub Total	18	13	10	8	3	5					57	17
AVAILABILITY OF JOB												
1. Presently had Job	4	2	1									
2. Previous Experience	4	14	2	1	1							
3. Availability of Job	8	6	3	2	2		1					
Sub Total	16	22	6	3	3		1				51	15
JOB LOCATION												
1. Convenient Location in Relation to Home	4	2	10	6	2			2				
2. Convenience of Transportation	1	2	1	6								
Sub Total	5	4	11	12	2			2			36	11
FREE TIME AND SOCIAL LIFE												
1. Boy Friends			4		1	1						
2. Free Time; Social Life	2	2	3	6	1	2						
3. Attend Summer or Nigh' School	2	3	2	1			2					
Sub Total	4	5	9	7	2	3	2				32	9
Total Number	73	74	70	55	80	16	9	5	4	1	337	100

Mean = 4.5

CHAPTER V

FINDINGS

Introduction

The conceptual framework which operationally defined five decision classes of strategic, tactical, policy, control and program and three decision linkage components of form, range, and scope was the theoretical base for this decision analysis.

Analysis of satellite decisions was made according to the following demographic characteristics: age, educational level, students' major, summer occupation, and also by decision task areas. Analysis was also made of linkage combinations on the decision profiles, and between and among decision task areas. Analysis was made of satellite decisions according to the chronological sequence of the total decision complex. Lastly a comparison of this study's results was made with the results of Plonk's (24) research.

Decision Class

From the questionnaire, a decision profile was constructed for each of the 74 respondents. From these

profiles, the total numbers for all classes of satellite decisions were computed for the entire sample.

The total number of satellite decisions classified in this study was 1236 (Table 5.1). Approximately 44 percent of the decisions were classified as tactical, about 37 percent of the decisions were classified as program, and only one-half of one percent of the decisions were classified as control.

Table 5.1 - Number of Decisions by Class

Decision Class	Total Number	Total Percent
Tactical	553	44.7
Policy	213	17.2
Program	462	37.4
Control	6	.5
X Decision	2	.2
Total	1236	100.0

A frequency distribution indicates the range for all decision classes. Dispersion characterizes the total number of decisions recorded in each class by the respondents. The variation in range for total decisions made by the respondents was 42, while the variation in range for tactical, policy, program, control and X was 27, 10, 15, 2, and 1, respectively.

For analysis, the totals for each decision class were grouped by number intervals (Table 5.2). Seventy-eight percent of the respondents made between 0 and 10 tactical decisions. Eighty-three percent of the respondents made between 1 and 5 policy decisions while about 50 percent of the respondents made between 1 and 5 program decisions. Over 80 percent of the respondents recorded between 6 and 25 satellite decisions.

All respondents recorded tactical and program decisions while 95 percent recorded policy decisions (Table 5.3).

Table 5.2 - Number Intervals by Decision Class

Number Interval	Decision Classes										Total Number of Decisions	
	Tactical N ^a	%	Policy N	%	Program N	%	Control N	%	X N	%	N	%
0			4	5			69	94	72	97		
1-5	33	44	61	83	38	51	6	6	2	3	2	3
6-10	25	34	9	12	25	34					21	28
11-15	11	15			11	15					11	15
16-20	2	3									20	27
21-25	1	1									10	14
26-30	2	3									6	8
31-35											3	4
46-50											1	1
Total	74	100	74	100	74	100	74	100	74	100	74	100

^aN equals the number of respondents reporting.

Table 5.3 - Combination of Decision Class on Decision Profiles

Decision Class	Number of Respondents	Total Percent
Tactical, Program, Policy, Control	5	7
Tactical, Program, Policy	65	88
Tactical, Program	4	5
Total	74	100

Decision Classes by Demographic Characteristics

Table 5.4 reports the mean, mode and range for the decision classes for the 74 respondents.

Age - After the respondents were grouped according to age, the means were computed for each decision class (Table 5.5). The respondents age 19 tended to have means for all decision classes slightly higher than the total group means for all decision classes, while those respondents 22 and over tended to have means for all decision classes much higher than the total group mean for all decision classes. The extreme difference between the age group 22 and up and the 19 year olds hinges primarily on the nature of occupations which the respondents chose. A few of the respondents in the age group 22 and up chose teaching jobs and one was a manager of a store, these occupations themselves call for more decisions than those of waitress and

secretary mainly chosen by the 19 year olds.

Table 5.4 - Decision Class Statistics

Class	Statistics		
	Mean	Mode	Range
Tactical	7.5	5	1-27
Policy	2.9	1	0-10
Program	6.2	5	1-15
Control	.08	0	0-2
X Decisions	.02	0	0-1
All Decisions	16.7	8-9, 18-20	5-46

Table 5.5 - Age by Decision Class

Age	Mean					Total
	Tac- tical	Policy	Pro- gram	Con- trol	X	
19 N=8	5.3	3.6	7.0	.1		16.1
20 N=43	7.3	2.7	6.0	.1	.02	16.3
21 N=18	7.5	2.8	5.7		.05	16.2
22 and Up N=5	12.2	3.4	6.6			22.2

Educational Level - The means for all the decision classes were computed for each college year represented (Table 5.6). The respondents in the second and fourth years of college tended to have all the decision class means higher than the total group decision class means.

Table 5.6 - Educational Level by Decision Class

College Educational Level	Tac- tical	Policy	Mean Pro- gram	Con- trol	X	Total
Second Year N=6	8.0	3.1	6.1			17.3
Third Year N=52	7.1	2.7	6.3	.1	.03	16.2
Fourth Year N=16	8.5	3.4	6.0			17.8

Students' Major - The means for all the decision classes were computed for each major represented (Table 5.7). The respondents that were Non-Home Economics majors and those not reporting a major tended over all to have means for all decision classes higher than the total group means for all the decision classes. Respondents with General Clothing, Textiles, and Retailing have means lower than the total group means for all decision classes.

Summer Occupation - After the respondents were grouped according to summer occupation, the means were computed for all the decision classes (Table 5.8). The service occupational group, comprising 52 percent of the respondents, had the highest means for the decision classes, and these means were higher than the total group means for all the decision classes. The second largest occupational group, clerical and sales, composed of 44 percent of the respondents, had decision class means that were lower than

Table 5.7 - Students' Major by Decision Class

Major	Mean				Total
	Tactical	Policy	Program	Control	
Home Economics Education and General Home Economics N=26	7.6	2.9	6.0	.07	16.8
General Clothing, Textiles and Retailing N=13	5.9	2.3	6.4		14.7
Interior Design N=13	7.3	3.3	6.1	.1	17.0
Child Development and Teaching N=6	9.9	2.0	5.8		16.8
Foods and Nutrition N=6	6.6	3.5	7.3	.1	17.6
Non-Home Economics N=4	9.0	3.2	5.0		17.2
Not Reporting N=6	8.3	2.6	6.8	.1	18.1

Table 5.8 - Summer Occupation by Decision Class

Occupation	Mean					Total
	Tactical	Policy	Program	Control	X	
Professional, Technical and Managerial N=3	11.3	2.0	2.3			15.6
Clerical and Sales N=33	6.1	2.7	5.7	.1	.03	14.8
Service N=39	8.3	3.0	6.7	.02	.02	18.1
Farming, Fishery and Forestry N=4	4.2	2.0	4.2	.2	.2	11.0
Benchwork N=2	5.0	5.5	6.0			16.5
Miscellaneous N=1	4.0	5.0	5.0			14.0

the total group decision class means. Occupational group of professional technical, and managerial had the highest mean for the decision class of tactical. Whereas, the miscellaneous occupational group had the lowest mean in the decision class of tactical. However, the N for this occupation is extremely small, no conclusions can be drawn.

Decision Task Areas

As the decision profiles were being constructed, the recorded decisions were placed into eight predetermined decision task areas. The decisions in the various task areas were made in order to complete the action of the central decision.

Table 5.9 shows the analysis made of the decision classes by tasks. The most decisions, about one-fifth of the total, were made concerning Uses of Earned Income. Approximately one-sixth of the decisions were reported in each of the three decision task areas of On the Job, Leisure, and Clothing.

More tactical decisions were made in the task area of Clothing than in any other area. Uses of Earned Income received the second highest number of tactical decisions while Leisure received the least number of tactical decisions.

The most policy decisions, over 50 percent were made in the task area of Uses of Earned Income. This area having the highest number of policy decisions and ranking second in the highest number of tactical decisions, indicates that it played a crucial role in completing the central decision.

The most program decisions, about 40 percent, were made in the task area of Leisure; Meals and Maintenance ranked second with 26 percent of the decisions.

Of the very few control decisions made, 50 percent were made in the task area of Meals and Maintenance and 33 percent applied to the occupation and were made in the task area of On the Job decisions.

For accomplishing the central decision, satellite decisions occurred in all of the eight task areas (Table 5.10).

Table 5.9 - Number of Decisions by Task and Class

Task	Decision Class										Total	
	Tactical		Policy		Program		Control		X		N	%
	N	%	N	%	N	%	N	%	N	%		
Clothing	174	31	5	2.3	5	1.0			1	50	185	15.0
Housing	69	13	1	.5							70	5.6
Meals and Maintenance	16	3	17	8.0	120	26.0	3	50			156	12.6
Uses of Earned Income	116	21	117	54.9	8	1.8	1	17			242	19.6
Transportation	38	7	6	2.8	78	16.9					122	9.9
Leisure	15	3	8	3.8	191	41.3					214	17.3
On the Job	102	18	53	24.9	58	12.6	2	33	1	50	216	17.5
Other	23	4	6	2.8	2	.4					31	2.5
Total	553	100	213	100	462	100	6	100	2	100	1236	100

Table 5.10 - Number of Decisions by Class and Task

Class	Task															
	Clothing	Housing	Meals & Maintenance	Uses of Earned Income	Transportation	Leisure	On the Job	Other								
Tactical	174	94.1	69	98.6	16	10.2	116	48.0	38	31.1	15	7.0	102	47.2	23	74.1
Policy	5	2.7	1	1.4	17	10.8	117	48.3	6	4.9	8	3.7	53	24.5	6	19.4
Program	5	2.7			120	77.0	8	3.3	78	64.0	191	89.3	58	26.9	2	6.5
Control					3	2.0	1	.4					2	.9		
X Decision	1	.5											1	.5		
Total	185	100	70	100	156	100	242	100	122	100	214	100	216	100	31	100

Approximately 44 percent of the decisions were tactical and 37 percent of the decisions were program. Tactical decisions were primarily concerned with Uses of Earned Income, Clothing, and On the Job decisions. Program decisions included the two task areas of Leisure and Meals and other Maintenance. Though Housing and Transportation hold no predominance in the number of decisions, this does not decrease their importance. Housing and Transportation would seem to be areas for relatively long-standing, singular decisions in contrast to other areas such as Leisure, Meals and Maintenance which allow for frequent, "fresh" decisions.

Linkage

Form

In the conceptual framework, three major forms of decision linkage were identified: series, radial, and compound. Series linkage was subdivided into multiple class and single class; radial linkage was subdivided into single, multiple, multiplex and inverted. Compound linkage had no subdivisions.

Forms of Linkage on Decision Profile - The decision profiles, first were analyzed for forms of decision linkage (Table 5.11). While 22 percent of the respondents had only a radial linkage form, 71 percent of the respondents had a

combination of radial and series. Only four percent of the respondents used a combination of series, radial and compound.

Table 5.11 - Forms of Linkage on Decision Profiles

Form	Number of Respondents	Total Percent
One Form		
Radial	16	22
Combination of Two Forms		
Radial and Series	53	71
Radial and Compound	2	3
Combination of Three Forms		
Radial, Series, and Compound	3	4
Total	74	100

Combination of Linkage Forms on Profile - A detailed analysis of the decision profiles revealed 17 combinations of linkage forms (Table 5.12). Thirty percent of the linkage forms were divided evenly between single radial form and a combination of single radial, multiple radial, single series, and multiple series forms. Of the remaining 70 percent of the linkage forms, 28 percent were evenly divided between two combinations: 1) single radial and single series, and 2) single radial, single series, and multiple series. One-third of the respondents had a combination of three linkage forms. Only two respondents recorded a

Table 5.12 - Combinations of Linkage Forms on Decision Profiles

Combination of Forms	Number of Types	Number of Respondents	Total Percent
Single Radial	1	11	15
Single Radial, Multiple Radial	2	3	4
Single Radial, Inverted Radial	2	2	3
Single Radial, Compound	2	1	1
Single Radial, Single Series	2	10	14
Single Radial, Multiple Series	2	5	7
Single Radial, Single Series, Multiple Series	3	10	14
Single Radial, Multiple Radial, Single Series	3	8	11
Single Radial, Multiple Radial, Multiple Series	3	4	5
Single Radial, Multiplex Radial, Multiple Series	3	1	1
Single Radial, Inverted Radial, Multiple Series	3	1	1
Single Radial, Multiple Radial, Single Series, Multiple Series	4	11	15
Single Radial, Inverted Radial, Single Series, Multiple Series	4	1	1
Single Radial, Multiple Radial, Inverted Radial, Compound	4	1	1
Single Radial, Multiple Radial Single Series, Compound	4	2	3
Single Radial, Multiple Radial, Multiple Series, Compound	4	1	1
Single Radial, Multiple Radial, Single Series, Multiple Series, Inverted Radial	5	2	3
Total		74	100

combination of five linkage forms.

Linkage Forms with Decision Totals in Each Form - A summary in Table 5.13 is given of the forms of linkage on the decision profiles. Approximately 80 percent were single radial linkage forms; however, only 58 percent of the decisions connected to the central decision by this form of linkage. Over 34 percent of the decisions are connected to the central decision by the following three linkage forms which total 17 percent; single class series, multiple class series, and multiple radial.

Table 5.13 - Number of Decisions Within Linkage Forms

Linkage Form	Linkage		Decision	
	Number	Percent	Number	Percent
Radial				
Single	733	80.3	733	59.3
Multiple	50	5.5	184	14.9
Inverted	7	.8	24	1.9
Multiplex	1	.1	6	.5
Series				
Single Class	68	7.5	150	12.2
Multiple Class	48	5.2	109	8.8
Compound	6	.6	30	2.4
Total	913	100.0	1236	100.0

Decision Linkage Among Task Areas - Approximately 94

percent of the decisions were linked within the same task area, while the remaining 4 percent were linked between or across decision task areas (Table 5.14). Two percent of the linkage forms were between the decision task areas of Clothing and Uses of Earned Income. There were seven different combinations of task areas which contained linked decisions.

Table 5.14 - Linkages Between Decisions in Task Categories

Linkages	Linkage		Decision	
	Number	Percent	Number	Percent
Between Task Categories				
Clothing and Uses of Earned Income	18	2.0	58	4.7
Meals and Maintenance and Uses of Earned Income	12	1.3	37	3.0
Transportation and Uses of Earned Income	10	1.1	34	2.8
Housing and Uses of Earned Income	8	.9	20	1.6
Housing, Uses of Earned Income and Transportation	2	.2	7	.6
Uses of Earned Income and Other	1	.1	2	.2
Housing, and Meals and Maintenance	1	.1	3	.2
Subtotal	52	5.7	161	13.1
Within Task Categories	861	94.3	1074	86.9
Total	913	100.0	1236	100.0

Scope

Scope refers to the number of decisions within each band on the profiles. Approximately 74 percent of the total number of decisions appeared in Band #1 (Table 5.15). After the decisions were divided by decision class in each band, Band #1 had the highest number of decisions with tactical, policy, program, and X each having 66, 76, 83, and 100 percent of the decision, respectively. Sixty-seven percent of the control decisions appeared in Band #2. By definition, no control decision was in Band #1.

Within Band #1, over 42 percent of the decisions were program. While Bands #2, 3, and 4 had decision representation in the three classes of tactical, policy and program, the tactical decisions tended to be slightly higher in percent than the classes of policy and program.

Analysis of Table 5.15 also illustrates as the band number increases the number of satellite decisions reported decreases.

Range

Range refers to the number of bands through which the satellite decisions are linked to the central decision. Only 43 percent of the profiles illustrated satellite decisions linked to the central decision through two bands, but one-third of the respondents reported satellite decisions linked

Table 5.15 - Number of Decisions by Band, Class, and Scope

Band	Number of Decisions in Each Class							
	Tactical		Policy		Program		Control	
	N	%	N	%	N	%	N	%
1	367	66.4	162	76.1	387	83.8		
2	147	26.6	44	20.6	57	12.3	4	67.0
3	35	6.3	6	2.8	14	3.1	1	16.5
4	3	.5	1	.5	3	.6	1	16.5
5	1	.2			1	.2		
Total	553	100.0	213	100.0	462	100.0	6	100.0
							2	100.0

to the central decision through three bands (Table 5.16). Less than 10 percent of the respondents had decisions linked to the central decision through Bands #4 and 5.

Table 5.16 - Decision Linkage Range

Number of Bands	Number of Profiles	Total Percent
1	11	15
2	32	43
3	25	34
4	3	4
5	3	4
Total	74	100

Further analysis of the satellite linkages found 80 percent of the satellite decisions which had no other decisions linked to them, i.e. their only link was to the central decision (Table 5.17). Less than one percent of the linkages extended through Bands #4 and 5.

The decision linkage range by tasks and the number of decisions in each band by class is presented in Table 5.18. The longest linkage range which extends through five bands occurred in the three task areas of Meals and Maintenance, Transportation, and On the Job decisions. Although the task area of Leisure ranks third highest in the total number of decisions made, the range in this task area only

extends through two bands.

Table 5.17 - Decision Linkage, Range, and Scope

Number of Bands	Number of Linkages	Total Percent
1	733	80.3
2	142	15.6
3	32	3.5
4	3	.3
5	3	.3
Total	913	100.0

Analysis of the decisions for each band by decision task area illustrates again, that 74 percent of all the decisions were made in Band #1 while less than 10 percent of the decisions are in Bands #4 and 5 (Table 5.19).

Decision Sequence

Forty-five of the 74 respondents chronologically numbered all the satellite decisions made following the central choice. Only the sequence data from these 45 respondents are included in the analysis. Number 1 was assigned to the first decisions made following the central choice, #2 was assigned to the second, and the highest number was the decision made farthest from the central choice timewise.

Decision sequence was studied for various purposes.

Table 5.18A - Number of Decisions by Class, Task and Bank

Decision Class		Task Areas									
		Clothing					Housing				
		Band		Band		Band		Band		Band	
		1	2	3	4	1	2	3	4	1	2
N	%	N	%	N	%	N	%	N	%	N	%
Tactical	104 92.0	55 98.2	13 92.9	2 100	49 100	14 93.3	6 100				
Policy	5 4.4					1 6.7					
Program	3 2.7	1 1.8	1 7.1								
Control											
X Decision	1 .9										
Total	113 100	56 100	14 100	2 100	49 100	15 100	6 100				

Table 5.18B - Number of Decisions by Class, Task and Band

Decision Class	Task Areas																	
	Meals and Maintenance										Uses of Earned Income							
	1 N	1 %	2 N	2 %	3 N	3 %	4 N	4 %	5 N	5 %	1 N	1 %	2 N	2 %	3 N	3 %	4 N	4 %
Tactical	10	9.4	6	16.7							58	38.4	47	63.6	11	68.7		
Policy	12	11.3	4	11.1	1	8.3					88	58.3	24	32.4	4	25.0	1	100
Program	84	79.3	25	69.4	10	83.4			1	100	5	2.3	2	2.7	1	6.3		
Control			1	2.8	1	8.3	1	100					1	1.4				
X Decision																		
Total	106	100	36	100	12	100	1	100	1	100	151	100	74	100	16	100	1	100

Table 5.18C - Number of Decisions by Class, Task and Bank

Decision Class	Task Areas									
	Transportation					Leisure				
	1 N	1 %	2 N	2 %	3 N	3 %	4 N	4 %	5 N	5 %
Tactical	26	28.9	8	30.8	2	66.7	1	50	1	100
Policy	3	3.3	3	11.5						
Program	61	67.8	15	57.7	1	33.3	1	50	181	89.6
Control									10	83.3
X Decision										
Total	90	100	26	100	3	100	2	100	1	100

Table 5.18D - Number of Decisions by Class, Task and Band

Decision Class	Task Areas									
	On the Job					Other				
	1 N	2 N	3 N	4 N	5 N	1 N	2 N	3 N	1 N	2 N
	%	%	%	%	%	%	%	%	%	%
Tactical	86 48.0	14 45.1	2 50			21 75.0	1 50	1 100		
Policy	41 23.0	11 35.5	1 25			5 17.9	1 50			
Program	51 28.4	4 12.9	1 25	1 100	1 100	2 7.1				
Control		2 6.5								
X Decision	1 .6									
Total	179 100	31 100	4 100	1 100	1 100	28 100	2 100	1 100		

Table 5.19 - Number of Decisions by Range and Task

Decision Task Areas																
Band	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure		On the Job		Other	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	113	61	49	70	106	68.0	151	62.4	90	73.8	202	94.4	179	82.9	28	90.3
2	56	31	15	21	36	23.1	74	30.6	26	21.3	12	5.6	31	14.3	2	6.5
3	14	7	6	9	12	7.7	16	6.6	3	2.5			4	1.8	1	3.2
4	2	1			1	.6	1	.4	2	1.6			1	.5		
5					1	.6			1	.8			1	.5		
Total	185	100	70	100	156	100	242	100	122	100	214	100	216	100	31	100

The prime purpose was to explore the crisscrossing of decisions between and among task areas following the central choice. The research questions regarding decision sequence analysis were: Are a block of decisions made in one task area, followed by a block of decisions in another or are decisions either individually or in blocks, more intermeshed among various task areas? Do the decision sequence numbers determine any general trend or crisscrossing among task areas as the sequence continues? Do decision task areas with low sequence numbers have any relation to task areas with high sequence numbers? Exploration of decision sequence among the task areas ought to provide insight into these questions.

Modified cross-tabulation tables were constructed to explore decision sequence emanating from the central decision. Considering all decision reported by respondents as a totality, all decisions #1 within a task area were placed in the cell where the task area intersected itself. All sequenced decisions following #1 were charted in the following manner: first, the task area where the preceeding decision was made is charted on the vertical axis; second, the task area where the subsequent decision was made is on the horizontal axis; and third, the point where the horizontal and vertical axes intersects is the cell where the

decisions being charted are to be placed. For discussion purposes all charts will be read from left to right.

Analysis in Table 5.20 A, B, C, and D shows the frequency distribution of reported sequenced decisions for each decision task area and also, for all the task areas. In Table 5.20 the number sequence of decisions is charted so the weaving of sequenced decisions among task areas will demonstrate the crisscrossing pattern. For example, the cell Transportation - Transportation (Table 5.20B) has 10 decisions sequenced #1. To continue with one sequence, decisions sequenced #2 are located in 5 different task areas: Transportation, Uses of Earned Income, Clothing, Leisure, and On the Job. Some decisions #2 were in Transportation, these were placed in the same cell as #1 because they follow consecutively; however, some #2 were in another task area i.e. Uses of Earned Income, and were placed horizontally one cell to the left, Transportation - Uses of Earned Income. To continue, decision #2 was in Uses of Earned Income. To determine in which task cell decision #3 was placed, a move to the horizontal row labeled Uses of Earned Income is necessary because this is the task area where the preceeding decision was made. A review of those task areas where decisions #3 were made are Clothing, Housing, Meals and Maintenance, and Uses of Earned

Table 5.20A - Decision Sequence by Decision Task Areas

Preceding Decision Task Area	Subsequent Decision Task Area															
	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure		On the Job		Other	
	S ^a	N ^b	S	N	S	N	S	N	S	N	S	N	S	N	S	N
Clothing	1	9	3	1	2	2	2	1	2	1	2	1	4	1	3	3
	2	5	7	1	3	1	3	1	3	1	3	4	5	1	5	1
	3	4	9	1	4	1	4	3	4	3	4	3	7	1	6	1
	4	4			5	1	5	2	5	2	11	1	11	1		
	5	2			6	1	7	2	11	1	12	1	12	1		
	6	4			7	1	8	2			19	1				
	7	7			8	1	9	1								
	8	5			9	2	10	1								
	9	3					11	2								
	10	2					13	2								
	11	1					17	1								
	12	1					33	1								
	15	1														
	16	1														
	32	1														
	Housing	2	4	1	15	2	1	2	1	2	6					
3		2	2	3	3	1	3	1								
5		1	3	1	4	1	4	1								
6		1	4	1	10	1	6	3								
8		1	5	2	13	1	8	1								
31		1			15	1	15	1								

^aS equals the sequence decision number.

^bN equals number of respondents reporting sequence decision number.

NOTE: All decisions directly following the central choice, sequence #1, were placed in one of the 8 self-intersecting task area cells.

Table 5.20A - Continued

Preceding Decision Task Area	Subsequent Decision Task Area															
	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure		On the Job		Other	
	S ^a	N ^b	S	N	S	N	S	N	S	N	S	N	S	N	S	N
Meals and Maintenance	4	1	4	1	1	1	2	1	5	1	3	1	4	1	20	1
	6	1	5	1	3	1	3	1	8	1	7	1	5	1		
	10	1	7	1	4	1	4	1	13	1	9	1	6	1		
	11	1			5	2	5	1	15	2	10	1	8	1		
	14	1			6	2	7	1			11	2	17	1		
					7	3	8	1			12	1				
					8	3	9	2			14	1				
					9	4	11	4			17	1				
					10	6	14	1								
					11	2	15	1								
					12	2	29	1								
					13	2										
					14	2										
					16	1										
					17	1										
					18	1										
					19	1										
					28	1										

^aS equals the sequence decision number.

^bN equals number of respondents reporting sequence decision number.

NOTE: All decisions directly following the central choice, sequence #1, were placed in one of the 8 self-intersecting task area cells.

Table 5.20B - Decision Sequence by Decision Task Area

Preceeding Decision Task Area	Subsequent Decision Task Area															
	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure		On the Job		Other	
	S	N	S	N	S	N	S	N	S	N	S	N	S	N	S	N
Uses of	2	1	2	2	3	1	1	4	2	1	5	1	4	1	4	1
Earned	3	1	3	1	7	1	3	1	4	1	6	1	5	3	5	3
Income	4	2	4	1	8	1	4	3	5	1	7	2	7	2	7	2
	5	1	7	1	9	1	5	6	6	2	9	2	8	1	8	1
	6	5	14	1	10	1	6	2	12	1	10	1	9	1	9	1
	7	1	24	1	11	1	8	2	15	1	12	1	12	1	12	1
	8	1	30	1	12	1	9	4	16	1	15	1	13	1	13	1
	10	2			13	1	10	4	25	2	18	1	14	1	14	1
	12	1			14	1	11	4					18	1	18	1
					16	1	12	5					20	1	20	1
							13	3								
							14	4								
							15	3								
							16	4								
							17	4								
							18	4								
							19	3								
							20	1								
							21	1								
							22	1								
							23	1								
							24	2								
							25	1								
							26	1								
							27	1								

Table 5.20B - Continued

Preceding Decision Task Area	Subsequent Decision Task Area											
	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure	
	S	N	S	N	S	N	S	N	S	N	S	N
Transportation	2	3	6	1	3	1	2	1	1	10	2	1
	3	3	12	1	4	2	3	4	2	3	3	1
	4	1			6	1	4	2	3	2	6	1
	5	1			9	1	6	1	4	1	9	1
	6	1			13	1	7	1	5	2	14	1
	7	1			27	1	15	1	6	1	17	2
							17	1	7	2	26	1
									8	2		
									16	3		
									26	1		

Table 5.20C - Decision Sequence by Decision Task Areas

Subsequent Decision Task Area																
Preceeding Decision Task Area	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure		On the Job		Other	
	S	N	S	N	S	N	S	N	S	N	S	N	S	N	S	N
Leisure	5	1	5	1			6	1	2	1	1	2	2	1	13	1
	8	1	14	1			7	1	6	1	3	1	4	1	20	1
	9	1					8	1	14	1	4	2	8	1	21	1
	28	1					9	2			5	1	9	1		
							13	2			6	1	11	1		
							16	2			7	5	12	1		
							19	1			8	6	13	1		
							23	2			9	2	15	3		
							24	1			10	3	16	1		
											11	3	18	1		
											12	5	20	1		
										13	5					
										14	3					
										15	4					
										16	2					
										17	2					
										18	4					
										19	4					
										20	1					
										22	2					
										23	1					
										27	1					
										28	2					
										29	1					
										30	1					
										31	1					

Table 5.20D - Continued

Subsequent Decision Task Area																		
Preceding Decision Task Area	Clothing		Housing		Meals & Maintenance		Uses of Earned Income		Transportation		Leisure		On the Job		Other			
	S	N	S	N	S	N	S	N	S	N	S	N	S	N	S	N		
Other					18	1			14	1	3	1	12	1	2	1	2	
									20	1			21	1	2	1	2	
													32	1			17	1
																	18	1
																	19	1
																	20	1

Income. Decisions #3 were made in Housing, the #3 would be placed in the cell, Uses of Earned Income - Housing. Next, a move to the horizontal row of Housing is necessary. Charting continues in this manner.

Charting for a given group of respondents can only be done through decisions #2 and thereafter individual respondents cannot be traced.

The cell of Housing - Housing had the highest number (15) of decisions assigned #1. Self-intersecting task cells of Transportation and Clothing are ranked second and third. These three task cells together comprise about 76 percent of all decisions sequenced #1.

A predominance of decisions sequenced with numbers in the twenties was found in the task area of On the Job decisions which indicates the majority of these decisions were made the greatest distance from the central decision. Leisure followed second in predominance to On the Job decisions in this respect. The content nature of these two areas indicates that high sequence numbers might be expected.

Uses of Earned Income and Meals and Maintenance tend to spread the decision frequency throughout the total decision sequence range. However, there are some frequency clusters between decisions sequenced 5 to 10 and 11 to 20.

A review of sequence range for each cell indicates

in the majority of task cells, the numbers do not run consecutively through the sequence, thus a move from one task area to another is necessary to continue with the sequence. These moves also demonstrate that sequenced decisions crisscross among the task areas.

A summary of decision sequence is given in Table 5.21. The total number of decisions, a decision sequence mean and decision sequence range have been computed for each cell. For example, from Table 5.21, the cells of Meals and Maintenance - Clothing reports $N=5$, $M=9.0$ and $R=4-14$. This information states for this particular cell that the sequence numbers range (R) from 4 to 14, 5 (N) decisions were reported in this range, and the mean (M) of these 5 reported decisions is 9.0.

Analysis of Table 5.21 elicited several findings. A diagonal from the cell Clothing - Clothing down to Other - Other contains all self-intersecting task cells. The range for each of the 8 cells in the diagonal begins with #1. This is in accord with plotting procedures. Also since each cell had a #1 this indicates that out of the 8 task areas each one had at least one respondent report a decision in that area directly following the central choice.

A review of all cell N's shows the highest number in the self-intersecting cells. Obviously, from these 8

Table 5.21 - Decision Statistics by Decision Task Areas

Preceding Decision Task Area	Subsequent Decision Task Area							
	Clothing	Housing	Meals & Maintenance	Uses of Earned Income	Transportation	Leisure	On the Job	Other
Clothing	^a N=50	N=3	N=10	N=19	N=11	N=6	N=5	
	^b M=6.0	M=6.33	M=5.50	M=9.16	M=4.27	M=9.67	M=4.00	
	^c R=1-32	R=3-9	R=2-9	R=2-33	R=2-11	R=4-19	R=3-6	
Housing	N=10	N=22	N=6	N=8	N=6			
	M=6.40	M=1.73	M=7.83	M=6.25	M=2.00			
	R=2-31	R=1-5	R=2-15	R=2-15	R=2			
Meals & Maintenance	N=5	N=3	N=36	N=15	N=5	N=9	N=5	N=1
	M=9.00	M=5.33	M=10.25	M=9.93	M=11.20	M=10.44	M=8.00	M=20.00
	R=4-14	R=4-7	R=1-28	R=2-29	R=5-15	R=3-17	R=4-17	R=20
Uses of Earned Income	N=15	N=8	N=10	N=69	N=10	N=10	N=13	N=1
	M=6.33	M=10.75	M=10.30	M=12.61	M=11.60	M=9.80	M=10.58	M=17.00
	R=2-12	R=2-30	R=3-16	R=1-27	R=2-25	R=5-18	R=4-20	R=17

^aN equals number of decisions (as well as number of respondents).

^bM equals decision sequence mean.

NOTE: All decisions immediately following the central choice are sequenced #1 and placed in one of the 8 self-intersecting task area cells.

Table 5.21 - Continued

Preceding Decision Task Area	Subsequent Decision Task Area						On the Job	Other
	Clothing	Housing	Meals & Maintenance	Uses of Earned Income	Transportation	Leisure		
Transportation	N=10	N=2	N=7	N=11	N=27	N=8	N=8	
	M=3.70	M=9.00	M=9.43	M=6.09	M=5.41	M=1.75	M=6.25	
	R=2-7	R=6-12	R=3-27	R=2-17	R=1-26	R=2-26	R=2-17	
Leisure	N=4	N=2		N=13	N=3	N=65	N=13	N=3
	M=12.50	M=9.50		M=14.31	M=7.33	M=13.68	M=12.15	M=18.00
	R=5-28	R=5-14		R=2-16	R=2-14	R=1-31	R=2-20	R=13-21
On the Job	N=3		N=8	N=6	N=1	N=18	N=69	N=7
	M=8.00		M=7.37	M=7.17	M=7.00	M=12.22	M=12.75	M=15.29
	R=3-8		R=2-16	R=4-12	R=7	R=5-27	R=1-26	R=9-24
Other			N=1	N=2	N=1	N=3	N=3	N=7
			M=18.00	M=17.00	M=3.00	M=21.67	M=14.67	M=11.14
			R=18	R=14-20	R=3	R=12-32	R=2-21	R=1-20

cells, 45 of the decisions will be #1. However, the remaining number of decisions in these cells indicates that sequenced decisions were made consecutively from the preceeding decision in the same task area.

The decision task cell of Housing - Housing has the lowest mean of 1.73, indicating that more decisions assigned low sequence numbers were made in this cell than any other. Whereas the decision task area of Other had the highest means (ranging 11.14 - 21.67 except one mean of 3.0) indicating the decisions made were assigned the high sequence numbers and were made some distance from the central choice.

Self-intersecting task cells of Uses of Earned Income, and On the Job decisions tied for 69 reported decisions or the most decisions made in any one cell.

The two cells Clothing - Clothing, and Clothing - Uses of Earned Income each had the widest range of 32 sequenced decisions. The highest number of decisions reported on any one of the 45 decision profiles was 33.

The block of four cells of Leisure - Leisure, Leisure - On the Job, On the Job- Leisure, and On the Job - On the Job indicate an interesting relationship. Thirteen On the Job decisions were sequenced following Leisure decisions, and 18 Leisure decisions were sequenced following On the Job decisions. Together this totals 31 decisions

which gives some indication that there is some relationship between Leisure decisions and On the Job decisions and vice versa. The data seem to indicate that once working hours and days off were decided, then leisure activities were chosen to fill the time. On the other hand, many respondents decided upon vacation time or a special leisure activity and then determine working hours around these activities. This gives some indication of reciprocal relationship between these two task areas. A similar relationship is found between the four cells of Clothing - Clothing, Clothing - Uses of Earned Income, Uses of Earned Income - Clothing, and Uses of Earned Income - Uses of Earned Income.

Comparison of Findings with Plonk's Research

A comparison of this study's results and Plonk's research was done to further analyze how decision class and linkage patterns differ from one central-satellite decision complex to another. A comparison of decision sequence was not made since Plonk did not include this dimension in her research. However, prior to a comparison of the findings a few basic differences and similarities of the researches ought to be noted. Plonk studied 50 respondents who had retired. This research studied 74 college

students ranging in age from 19 to 27. The 50 respondents of Plonk's were given no formal knowledge about central-satellite decision theory prior to collecting the data. Whereas the 74 students were verbally instructed about central-satellite decision complexes. In both researches, decision profiles were constructed in the same manner; however, the decision sequence numbers (number following each decision symbol) have different connotations in each study, sequence is not considered in this comparison.

Plonk's research studied the satellite decisions resulting from the central decision of retirement housing. Data were collected by interviewing 50 respondents. This present research studied the satellite decisions evolving from the central decision of students' summer occupational choice. Data were collected from 74 respondents by a self-administered questionnaire. Both researches were analyzed by classifying the satellite decisions by a decision typology and examining decision linkage.

Both studies classified the satellite decisions by the following four classifications; tactical, policy, program and control. However, the present research used a modified classification of tactical and program, while the other two classes remained in the original form. The specific differences between the original and modified

classes of tactical and program are explained in Chapter I.

Plonk's 50 respondents reported 1325 satellite decisions; 59 percent of the decisions were classified as tactical, 22 percent were policy, 11 percent were program, and 8 percent were control. The mean for all satellite decisions reported by the 50 respondents was 26.5. The 74 respondents of the present study recorded 1236 satellite decisions which were classified as 44 percent tactical, 17 percent policy, 37 percent program and only one-half of one percent control. The mean for all satellite decisions reported by the 74 respondents was 16.7

All 50 of Plonk's respondents reported tactical and policy decisions while 94 percent reported program decisions. All the 74 respondents of the present study recorded tactical and program decisions, and 95 percent recorded policy decisions. The predominance of certain classes of decisions relates to the central choice. The respondents making a choice about housing will be making certain decisions that will affect their life for several years, whereas the students working at a summer occupation, quite often have many policies and regulations previously established. In addition, the occupation may last only two or three months. Hence, the nature of the central decision chosen seems to give some indication of the

constraints, types, and content of the satellite decisions.

Plonk's findings indicated that the variables of sex, age, occupation, education, income and duration of time between decisions and action tended to affect the number of satellite decisions. Also, the present study's findings indicated that the variables of age, educational level, students' major and summer occupation tended to affect the number of satellite decisions. Specifically, in the present study the particular occupation chosen seemed to be a major variable in the number of decisions evolved from the central decision. The variable of age indicated that the number of satellite decisions seemed to increase as the respondent's age increased.

Plonk's linkage analysis indicated 93 percent of the linkages were radial. Of these, 90 percent were single radial, and the remaining three percent were multiple, inverted and multiplex forms. Seven percent of the linkages were equally divided between multiple and single class series forms. The present research found about 86 percent of the linkages of the radial form. Of these, 80 percent were the single radial form and the remaining 6 percent represented multiple, inverted and multiplex. Series linkage forms composed a little over 12 percent. The particular difference between the two results illustrate more

radial forms of decision linkage in Plonk's research while the present study had a higher percentage of decisions linkage forms other than radial.

Both studies had 17 combinations of decision linkage forms appear on the decision profiles, but these were not the same 17 combinations for both studies. The most frequent combination of linkage forms reported in Plonk's research are single radial and multiple class series which were reported by one-fifth of the respondents. From the present study the following two combinations of linkage forms were reported equally by 30 percent of the respondents: 1) single radial and 2) single radial, multiple radial, single series, and multiple series.

Scope was the linkage component used to describe the number of decisions in the bands on the decision profile. Plonk's research indicated that 86 percent of the satellite decisions were diagrammed in Band #1 which were directly linked to the central decision. Band #2 held about 11 percent of the satellite decisions while Bands #3, 4, and 5 had only 3 percent of the decisions. Approximately two-thirds of the decisions in Band #1 were tactical while most of the decisions in Bands #2, 3, 4, and 5 were control. The results from the present study indicated approximately 74 percent of the satellite decisions made were in Band #1 which

directly linked to the central decision. Approximately 20 percent of the satellite decisions made were in Band #2 and the remaining 6 percent were in Bands #3, 4, and 5. About 42 percent of the satellite decisions made in Band #1 were program while the tactical decisions tended to dominate Bands #2, 3, 4, and 5. The difference between the two researches is rather clear with one having a higher percentage of satellite decisions in Band #1 and both varied in the dominance of decision class.

Range describes the number of bands through which the satellite decisions were linked to the central decision. Plonk's results indicate, that on one-half of the decision profiles, the range of satellite decisions extended through two bands to the central decision and in one-third of the profiles it extended through three bands. The present study indicated that about 43 percent of the decisions extended through two bands and 34 percent extended through three bands. Both researches reported the longest linkage range extended through five bands.

From the analyzed data, Plonk found that the reported satellite decisions centered around six task categories:

- 1) choosing an apartment unit, 2) establishing an apartment, unit, 3) reducing possessions, 4) transporting self and possessions, 5) establishing self in the community, and 6)

forming living patterns. The present study predetermined the following eight decision task areas (categories): 1) Clothing, 2) Housing, 3) Meals and other Maintenance, 4) Uses of Earned Income, 5) Transportation, 6) Leisure, 7) On the Job decisions and 8) Other. The predetermined categories derived from pretest data were used in the present study as guides for the respondents to focus their thinking in answering the self-administered questionnaire. On the other hand, Plonk derived the task areas ex post facto from the responses given in the interviews.

In conclusion, this comparison indicates that different central decisions evolve differences in number of satellite decisions. The satellite decisions can be classified by similar decision classes but the predominance of a certain class over another seems to depend on the central decision. Lastly, the satellite decisions form linkage patterns which also vary in range, form, and scope. Succintly, the content of these two central decision indicates that the satellite decisions will vary in number, class, and linkage forms.

CHAPTER VI

SUMMARY AND IMPLICATIONS

This chapter summarizes the results of this exploratory and descriptive study which focused on a central decision and its satellite decisions, and their class, linkage, and sequence; discusses findings; indicates limitations of the study, and suggests implications for further research.

Summary of Study

The researcher studied the central decision of students' summer occupational choice. Seventy-four Michigan State University students enrolled in the HMC 331 course completed a self-administered questionnaire. Data analysis of the central-satellite decision complex revolved around three conceptualizations. First, all decisions were classified according to the classes explained in Chapter I. The central decision is synonymous with strategic decision. Satellite decisions were classed as tactical, policy, program, and control. Decision linkage, the second conceptualization, included the three components of form,

scope, and range. Forms of decision linkage are divided into series, radial, and compound with further subdivisions in each form except compound. Lastly, sequence of satellite decisions was viewed in relation to the total central-satellite decision complex.

Demographic data, the central decision, and satellite decisions were all recorded on the questionnaire. The content of each recorded decision served as a basis for decision classification and for determining linkage and interdependence. Following classification of all reported satellite decisions, decision profiles were constructed for each respondent for analysis of class and linkage.

Findings indicate that tactical decisions were the most frequently reported class while program, policy, and control followed in order, respectively. Of the 1236 satellite decisions reported, 44 percent were classified as tactical, 37 percent program, 17 percent policy, and only one-half of 1 percent control. The tendency towards tactical and program decisions ranking first and second is undoubtedly related to the particular central decision under study. Many of the occupations chosen by students already had previously established policies about dress, manner in which work was to be done, and the like. Departing from this point, respondents made tactical or program

decisions to carry out and conform to these pre-established policies.

The mean for all satellite decisions reported by the 74 respondents was 16.7. However, a further investigation of the frequency of total number of decisions reported indicates a bi-modal curve with many students' totals numbering 8 and 9 or 18, 19, and 20. This bi-modal curve may explain that those students reporting few decisions chose an occupation which seemed fairly regimented and established, while those students reporting many decisions chose an occupation which seemed rather flexible and creative to the individual.

All the 74 respondents recorded tactical and program decisions while 95 percent recorded policy decisions and only 7 percent recorded control decisions.

The findings indicated that the variables of age, educational level, students' major, and summer occupation tended to affect the number of satellite decisions. The key variable was the summer occupational choice. If the chosen occupation elicited few decisions, then age, educational level and students major had little affect on the number of decisions. However, if the chosen occupation was unlimited in decision opportunities, then the older and more experienced plus the higher the education level a respondent had,

the higher the number of decisions.

Seventeen combinations of linkage forms appeared in the decision profiles. The following forms were reported equally by 30 percent of the respondents: 1) single radial, and 2) single radial, multiple radial, single series, and multiple series as a combination. Since single radial form is reported on 15 percent of the decision profiles, this indicates all the decisions are linked directly to the central choice which in turn suggests that certain occupations elicit decisions in particular task areas. Moreover, the other 85 percent of the respondents may have chosen occupations that require any number of decisions and in turn may weave various patterns of linkage.

Scope was the linkage component used to describe the number of satellite decisions in the bands of the decision profile. Findings indicated approximately 74 percent of the decisions were in Band #1 which linked directly to the central decision. Approximately 20 percent of the decisions were in Band #2 and the remaining 6 percent were in Bands #3, 4, and 5. About 42 percent of the decisions in Band #1 were program while tactical tended to dominate Bands #2, 3, 4, and 5.

Range describes the number of bands through which the satellite decisions extended beyond the central decision.

About 40 percent of the decisions extended through two bands, while 34 percent extended through three bands. The longest linkage range extended through five bands.

Decision sequence is the chronological ordering of satellite decisions following the central choice. Forty-five decision profiles were analyzed to explore sequence in relation to all task areas. More decisions sequenced #1 were made in the task area of Housing, followed by Transportation and Clothing. The highest sequenced decisions (numbered in the twenties) were in the task area of On the Job decisions followed by Leisure. Meals and Maintenance, and Uses of Earned Income tended to have a wide range of sequence numbers, but tended to have frequency clusters between sequence numbers 5 to 10 and 11 to 20.

Decision class, linkage and sequence were analyzed in the following eight task areas: 1) Clothing, 2) Housing, 3) Meals and Maintenance, 4) Uses of Earned Income, 5) Transportation, 6) Leisure, and 7) On the Job decisions, and 8) Other. These eight task areas were determined prior to analysis for use as guides for completion of the questionnaire.

A comparison of total numbers of decisions for each task area, and sequence number by task area indicates that decision task areas of Housing and Transportation excluding

Other have the lowest number of total decisions made and also the lowest sequence numbers which indicate they were made immediately or shortly following the central choice. Task areas of On the Job decision and Leisure ranked second and third highest for total number of decisions made, and also received the highest sequence numbers which indicate that many decisions were made in other task areas before decisions were made in these two. Lastly, the three task areas of Clothing, Meals and Maintenance, and Uses of Earned Income tended to have the widest sequence ranges but generally fell between the low sequence task area of Housing and the high sequence task area of On the Job. These three (Clothing, Meals, and Income) task areas vary in ranking of total number of decisions with the task area of Uses of Earned Income receiving the highest number of decisions in any task area.

Implications of Study

Several implications may be drawn from this study. Discussion primacy must reign with the central decision. Choice of the central decision is crucial since the entire study is based on its aftermaths. Students' summer occupational choice is a broad caption for a group of specific decisions which range widely in nature. Hospital aide, secretary, data coder, paper mill laborer, teacher, Good

Humor driver, and sales clerk are examples of occupations chosen by students which fall under this broad caption.

Each specific occupation has particular characteristics and demands all its own such as type of dress, kinds and amount of work, and hours of work. However, each specific occupation had some similarities with other occupations, for example, place to live in relation to occupation, transportation, and allocation of earned income. The delination between the broad and specific central choice is pertinent. Differences among the occupations are prime means for determining the variance of data according to variables. Hence, when occupational choice is mentioned it refers to a heterogenous grouping of specific occupations.

Decision classification contributed an important element to this study. The variations of classes of decisions from one decision profile to another indicated that some occupations were so pre-established as far as work policies, possible living quarters, and the like, that the decisions left for the respondents to make concerned details, such as the size of uniform needed for occupation. An occupation with fewer policies allowed for a respondent to make many types of decisions such as policies concerning work, and mode of dress. Though the decision classification relates in general to the nature of a possible occupation it also

eludes to the amount of freedom and responsibility a student as an employee has been given. An occupation which allows for more individual responsibility ought to evolve several decisions whereas an occupation with little responsibility ought to evolve few decisions on the respondents' part.

Frequency of reported decisions as a whole and by various task areas gives some indication of the nature of the occupation as to whether it evolves few or many choices.

Decision linkage is a most important aspect of a central-satellite decision complex since it presents visually what has taken place. Linkage not only give a visual appearance but also indicates which decisions are linked to other decisions, and which are linked directly to the central decision. The linkage between decisions also shows some logical order in which some decisions are made before others thus relating to decision sequence. Also, decision linkage indicates an overall pattern which is directly evolved from the central decision. The linkage patterns, either from a part or whole point of view, are tools which can be used to portray that one decision links to another and that no decision stands in isolation.

Decision sequence relates a certain amount of logic regarding which decisions are made prior to other decisions. In some cases sequencing is helpful in determining decision

linkage. Sequencing of decisions also reveals that all the decisions in one task area are not made consecutively within the area, but that there is a crisscrossing pattern among task areas. Decision sequence seems to give a sense of continuity to the complete decision profile. Through chronologically ordering all decisions, a decision complex as a whole has all its components (decision class and linkage) woven together.

In conclusion, the content of the central decision does affect the satellite decision classes, and decision linkage, and may affect decision sequence in a central-satellite decision complex.

Limitations of Study

Limitations of this study are discussed relative to the respondents, methodology, data collection and analysis.

Respondents

The students were asked in the questionnaire to recall the decisions made following their specific occupational choice. Though the data were gathered one and a half months into the fall term, most students would have at least a four to five month (June to October), if not longer, period for recall.

Even though the students were familiar with decisions

through studying decision theory, their ability to express themselves coherently in a written manner affected the findings. Some students wrote their decisions clearly and concisely, other rambled, and some were illegible.

Methodology

Students completed a self-administered questionnaire within a time limit. For some, this time was not long enough to complete the questionnaire in its entirety replete with sequencing. Several students commented as they handed in their questionnaires, "I did not have enough time to complete it," or "I ran out of time." Perhaps, a follow-up interview with each respondent might help supply missing information, clarify decisions, and complete decision sequence where needed.

Data Collection and Analysis

The period of recall was a limitation already cited but must be reemphasized again. Recall here does not only reflect period of time, but also the respondents ability to recall. The questionnaire was administered within a short time after the students had commenced fall term. It was hoped that the shorter the recall time and nearer to the actual summer experience, the more complete the data would be. However, recall is still a limitation because the central decision undoubtedly was made some time in advance of

the actual work experience. An approach to data collection might be to have subjects keep a diary on a day-to-day basis following the actual choice. This would lessen the limitation of recall and also might provide more complete data.

Since all decisions were not clearly and coherently written, decision classification was questionable in some cases. An approach of asking each respondent, given the decision classifications, to classify their own decisions might be an improvement over the researcher and another coder classifying the decisions.

The respondents sequencing of decisions helped link the decisions together and show dependence. However, not all sequenced decisions were sequenced in a logical manner. For example, when a reported decision obviously followed a previously made decisions which was not reported, an X decision was added to the decision profile to indicate an unreported decision. The addition of an X decision illustrates the illogic of the reported sequence. Therefore, it might be an improvement for the researcher to construct the decision profile and then review it with the respondent.

Respondents had some difficulty in sequencing satellite decisions in a chronological time order. In the beginning, some respondents found it difficult enough to recall and write the satellite decisions made following the

central choice, so to recall sequence proved even more difficult for some. Students occasionally reported two decisions as if they were one and therefore, assigned only one sequence number. Perhaps, if the researcher would review the questionnaire with the respondent after completion, sequencing limitations mentioned would be lessened.

Implications for Further Research

The utilization of decision class concepts indicates need for further clarification. Such clarification would possibly evolve from further tests and wider applications to different central-satellite decision complexes, as well as to different populations.

Findings indicated that centrality is the key determinant of the decision complex. However, the extent of decision centrality has not been explored and raises several lines of inquiry for the generation of hypotheses. Do the number of satellite decisions reported give any indication as to the extent of centrality of a decision? Are numbers of decision linkages, complexity of form, or combinations of different forms indicators of centrality extent? Could various classes of decisions be used to predict the extent of a central decision?

To explore this conception of centrality, research

of occupational choice applied to different age populations such as those entering life-time employment following high school graduation and/or college graduation, as well as those who left the employment world and now are reentering are some possible suggestions. Studies of various time periods over which consequences of decisions are in effect i.e. short time periods like three months an indefinite time period may affect centrality.

Further studies might also explore other central choices, i.e. a decision to return to college for advanced studies, a decision of buying a house or changing place of residence, the changing from one occupation to another, a decision to marry, to have children, and to obtain a divorce. Not only does extent of centrality need to be explored but different central decisions need to be researched. There also seems to be a need to study central decisions with populations varying in age, and education levels.

Decision linkage in this study was based on the content relation of the central-satellite decision complex. Though analysis of linkage was determined by content in relation to the central decision, the reported decisions in themselves did not always directly hinge on the central decision. Examination of some decision linkages tended to be based on resource allocation. For example, many students

chose to live at home because it was most economical. However, the actual living place may be determined by various resources and situations. Financial decisions in many profiles linked with clothing decisions, food expenditure decisions and recreation decisions. Hence, an approach to analyzing decision linkages might be resource allocation.

It is assumed that all decisions are influenced by situational and environmental factors. However, to what extent environmental factors determine the decision content or possible decision linkages is an area for exploration. For example, an On the Job decision relates to the central decision, but the specific decision concerning the job evolves from a particular situation. Questions might be raised as to what extent environmental factors influence decisions, and could they serve as a basis for determining decision linkage and sequence?

Trends in decision linkage is another area which deserves investigation. Possible studies could center on several central-satellite decision complex studies to determine if there are any tendencies toward certain decision linkages in certain task areas or are decision linkages individualistic.

Exploration of decision sequence indicates need for further research. Findings suggest that the central

decision had some influence as to what satellite decisions would be made first. However, the findings also indicated that as the decision sequence progressed, the sequencing did not depend so heavily upon the central decision but on the existing environmental situation. This relates directly to the idea previously discussed concerning the influences of environmental factors. A further suggestion for study of decision sequence would be to investigate in several central-satellite decision complexes similarities and differences in content of decisions made first, second, and so on. Would similarities occur only in studies with similar central decisions, or would each decision complex elicit its own particular sequence. Another line of inquiry would be to study the sequence of decisions to determine if there is a relationship between decision sequence and a priority or ranking of decision importance.

This study has shown interrelationships between and among decisions following a central choice. All of the decision interrelationships were focused on completing or carrying out the central decision. Some decisions were made before other decisions could be made; some decisions were unchanged while others were altered along the way; some decisions were made before other decisions indicating some sequence, and in total, all the decisions played a

role in executing the central decision. It would seem possible that if choice follows choice from a central decision that the reverse might also be true. A complex satellite decisions leading up to the central decision ought to be studied. This proposition is in accord with Gore's (6) reciprocal concept discussed in Chapter II. It appears that several small decisions made in some sequences are woven together and culminate into one central decision. If this were the case the central decision could not be made without taking the smaller decisions previously made into account.

Another suggestion for further study might be to examine a central decision that is about to be made and study the respondents projections or predictions as to what might evolve because of the choice. Though these projections may not take place, this may be an indication that the respondents can visualize some ties between a given decision and what might be forthcoming. Studies along these lines might be helpful in that a more refined tool may be discovered to help people visualize interrelationships among decisions.

Though the present study deals with decisions reported following a central choice, the next step may be to study in greater depth different influences on decisions, linkages, and sequence, plus a departure is needed to study

the satellite decisions which transpire prior to the central choice. Possibly out of many different researches, a more refined tool will evolve to help people visualize decision interrelationships in an effort to more effectively and realistically help people strive toward goal achievement.

LITERATURE CITED

Books

1. Simon, Herbert A. The New Science of Management Decision. New York: Harper & Row, Publishers, 1960.
2. Cooper, Joseph D. The Art of Decision-Making. Garden City, New York: Doubleday & Company, Inc., 1961.
3. Niles, Mary Cushing. The Essence of Management. New York: Harper and Brothers, 1958.
4. U.S. Department of Labor. Dictionary of Occupational Titles. Vol. II, Third Edition (1965), pp. 1-2.
5. Richards, Max D., and Greenlaw, Paul S. Management Decision-Making. Homewood, Ill.: Richard D. Irwin, Inc., 1966.
6. Gore, William J. Administrative Decision-Making: A Heuristic Model. New York: John Wiley & Sons, Inc., 1964.
7. Thompson, J. and Tuden, Arthur. "Strategies, Structures, and Process of Organization Decisions," Comparative Studies in Administration. Pittsburgh, Penn.: University of Pittsburgh Press, 1959.
8. Diesing, Paul. Reason in Society: Five Types of Decisions and Their Social Conditions. Urbana, Illinois: University of Illinois Press, 1962.
9. Morris, William T. Management Science in Action. Homewood, Illinois: Richard D. Irwin, Inc., 1963.
10. Gross, Irma H. and Crandall, Elizabeth Walpert. Management for Modern Families. New York: Appleton-Century-Crofts, 1963.

11. Katona, George. Psychological Analysis of Economic Behavior. New York: McGraw-Hill Book Company, Inc., 1951.

Periodicals

12. Alderson, Wroe. "Perspectives on the Planning Process," The Journal of the Academy of Management, Vol. 12, No. 3 (December, 1959), pp. 181-196.
13. Bach, Kurt. "Decisions Under Uncertainty," The American Behavioral Scientist, 4 (February, 1961), pp. 14-19.
14. Schlater, Jean Davis. "The Management Process and Its Core Concepts," Journal of Home Economics, Vol. 59, No. 2 (February, 1967), pp. 93-98.
15. Johnson, David L., and Kobler, Arthur L. "The Man-Computer Relationship," Science, 138 (November, 1962), pp. 873-879.
16. Hunt, Pearson. "Fallacy of the One Big Brain," Harvard Business Review, 55 (July, 1966), pp. 84-96.
17. Paolucci, Beatrice. "Managerial Decision Patterns," Penney's Fashion and Fabrics (Fall and Winter, 1963), pp. 13-17.
18. Delbecq, Andre L. "The Management of Decision-Making Within the Firm: Three Strategies for Three Types of Decision-Making," Academy of Management Journal, Vol. 10, No. 4 (December, 1967), pp. 324-339.
19. Diesing, Paul. "Noneconomic Decision-Making," Ethics, 66, No. 1 (October, 1955), pp. 18-35.
20. _____. "Socioeconomic Decisions," Ethics, 69, No. 1 (October, 1958), pp. 1-18.
21. Schlater, Jean D., and Vincent, Warren H. "Graduate Interdisciplinary Course in Management," Journal of Home Economics, 54 (November, 1962), pp. 782-784.

22. Paolucci, Beatrice. "Family Decision Making," Focus (April, 1965), pp. 3-4.
23. Knoll, Marjorie. "Toward a Conceptual Framework in Home Management," Journal of Home Economics, 55 (May, 1963), pp. 335-336.

Unpublished Materials

24. Plonk, Martha A. "Decision Class and Linkage in One Central-Satellite Decision Complex," Unpublished Ph.D. Thesis, Michigan State University, 1964.
25. Lancaster, Rita R. "Case Studies of the Decision-Making of Ten Non-College Educated Homemakers." Unpublished M.A. Thesis, University of Kansas, 1966.
26. Halliday, Jean Rowan. "Relationships Among Certain Characteristics of a Decision Event: Decision Procedure, Decision Context, and Decisionmaker." Unpublished Ph.D. Thesis, Michigan State University, 1964.
27. Myers, Anna Mae. "Class and Interrelatedness of Decision Ensuing from the Decision of Wives to Seek Employment." Unpublished M.S. Thesis, Virginia Polytechnic Institute, 1967.
28. Bymer, Gwen. "Family Financial Management: Some Research Direction," Address at National Seminar Workshop for Home Economics Administration, Lincoln, Nebraska, April 5, 1967.

APPENDIX A

ADMINISTRATION OF QUESTIONNAIRE

The questionnaire that you have in front of you is part of a research study presently taking place at Michigan State University in the Department of Home Management and Child Development. This study is concerned with the types and linkages of decisions.

This questionnaire is asking you to recall and relate the decisions you made concerning your past summer's job (gainful employment). Your answers will be kept confidential and coded for research use only. It will take you about 20 to 30 minutes to complete the three parts of the questionnaire. Take your time and give your answers some thought. The success of this particular study depends on your recall of decisions made.

Before you start, let us quickly review what a decision is. A DECISION REFERS TO A SITUATION WHERE A CHOICE IS MADE BETWEEN TWO OR MORE ALTERNATIVES. As an illustration of some decisions, I would like to refer to my last summers occupation of being an Assistant Camp Director in a girls' camp in New York. Upon making this central decision, several other decision situations came into existence. The first decision I made concerned what mode of transportation I would use to get myself from Michigan State University to New York. I wanted to do some traveling and visiting of friends before going to work in New York. After checking various transportation schedules, I chose to ride the bus rather than go by airplane or train to New York. Choosing to travel to New York by bus rather than a train or airplane is a good example of a decision made as a consequence of my central decision to work in New York. While on my job, I slept nights in a tent, wore a camp uniform on certain days, and had specified days off. These are not examples of decisions, but were pre-established policies at the camp. These policies resulted in no choice of sleeping arrangements or on-the-job clothing.

A decision I had to make concerned my bedding for the summer nights in camp. Since I was to sleep in a tent, this limited my alternatives. My decision was to use a sleeping bag. Had you not known I was going to be sleeping in a tent this summer, the decision to "use a sleeping bag" seems incomplete, and gives no reference as to why the sleeping bag was used. A more complete answer would be that

I chose to use a sleeping bag this summer because it seemed warmer and less bulky than bedding or bedroll for sleeping in a tent.

These are only examples of a very few of the decisions I made in regard to my summer occupation. However, these examples are given to help illustrate to you the difference between a decision, an incomplete decision, and a stipulation resulting from the central choice.

Please note: when you start part three, it is asking you to look at all your decisions and sequence them in totality rather than sequencing each task area section individually.

(The explanatory comments were given verbally to the students prior to their answering the questionnaire.)

QUESTIONNAIRE

PART I

1. Sex (circle) M F
2. Age _____
3. Marital Status (check)
☐ Single
☐ Married
☐ Separated
☐ Divorced
4. Education (check the highest level at present)
☐ First year college
☐ Second year college
☐ Third year college
☐ Fourth year college
☐ Graduate
☐ Other
5. Are you a major in the College of Home Economics?
☐ Yes
☐ No
6. If No is checked in question # 5, please specify the college in which you major is located. _____
7. College major _____
8. Check the source of income for your education.
☐ Self supported
☐ Parental support
☐ Scholarships or study grants
☐ Other
9. What was your 1967 summer occupation title?

10. Are you still engaged in this occupation?
☐ Yes
☐ No
11. How long (a number) have or were you engaged in this occupation?
☐ Weeks
☐ Months
☐ Years
12. Have you ever worked at this occupation before this past summer?
☐ Yes
☐ No

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13. Where was your 1967 summer occupation located?

 ,
City State

14. List below the reasons why you chose this particular occupation for the summer of 1967. Please list the reasons in order of importance, first being the most important and others in decending order of importance.

[illegible]

System of Equations

Let x and y be real numbers such that $x^2 + y^2 = 1$ and $x + y = 1$.

Find the value of $x^3 + y^3$.

Answer: $\frac{1}{2}$

Explanation: We are given the system of equations $x^2 + y^2 = 1$ and $x + y = 1$.

From the second equation, we can express y in terms of x :

$$y = 1 - x$$

Substituting this into the first equation, we get:

$$x^2 + (1 - x)^2 = 1$$

$$x^2 + 1 - 2x + x^2 = 1$$

$$2x^2 - 2x + 1 = 1$$

$$2x^2 - 2x = 0$$

$$2x(x - 1) = 0$$

$$x = 0 \text{ or } x = 1$$

$$y = 1 \text{ or } y = 0$$

$$(x, y) = (0, 1) \text{ or } (1, 0)$$

$$x^3 + y^3 = 0^3 + 1^3 = 1 \text{ or } 1^3 + 0^3 = 1$$

$$x^3 + y^3 = 1$$

$$x^3 + y^3 = 1$$

$$x^3 + y^3 = 1$$

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$$x^3 + y^3 = 1$$

PART II

Let's go back to the time when you made your summer occupational choice. What kinds of decisions did you have to make to get ready for your summer occupation? Would you trace these decisions as they were made. The decisions will vary in content and in the sequence or time order they were made following the initial choice of occupation. Some probable areas in which decisions were made might be: housing, meals and other maintenance, income and investments, transportation, clothing, leisure, "on the job" decisions, etc.

The decisions to be listed in this entire questionnaire are only those which refer to situations where a choice was made between two or more alternatives. Please list each decision in a separate box and ignore the columns labeled Code and Sequence Number. (Note: If more chart space is needed than provided on the pages, there are blank charts attached at the end of the questionnaire. If these blank charts are used, please fill in at the top the content area and use a separate sheet for each different content area.)

Now let's go back and trace these decisions in one area at a time.

1. The first part of the report deals with the general situation of the country and the progress of the work. It is a very interesting and informative account of the work done during the year.

2. The second part of the report deals with the results of the work. It is a very interesting and informative account of the results of the work done during the year.

3. The third part of the report deals with the conclusions of the work. It is a very interesting and informative account of the conclusions of the work done during the year.

[illegible]

the 1990s, the number of people in the world who are illiterate has increased from 750 million to 850 million. The number of illiterate people in the world is projected to increase to 900 million by the year 2015. The number of illiterate people in the world is projected to increase to 950 million by the year 2020. The number of illiterate people in the world is projected to increase to 1 billion by the year 2025. The number of illiterate people in the world is projected to increase to 1.1 billion by the year 2030. The number of illiterate people in the world is projected to increase to 1.2 billion by the year 2035. The number of illiterate people in the world is projected to increase to 1.3 billion by the year 2040. The number of illiterate people in the world is projected to increase to 1.4 billion by the year 2045. The number of illiterate people in the world is projected to increase to 1.5 billion by the year 2050. The number of illiterate people in the world is projected to increase to 1.6 billion by the year 2055. The number of illiterate people in the world is projected to increase to 1.7 billion by the year 2060. The number of illiterate people in the world is projected to increase to 1.8 billion by the year 2065. The number of illiterate people in the world is projected to increase to 1.9 billion by the year 2070. The number of illiterate people in the world is projected to increase to 2 billion by the year 2075. The number of illiterate people in the world is projected to increase to 2.1 billion by the year 2080. The number of illiterate people in the world is projected to increase to 2.2 billion by the year 2085. The number of illiterate people in the world is projected to increase to 2.3 billion by the year 2090. The number of illiterate people in the world is projected to increase to 2.4 billion by the year 2095. The number of illiterate people in the world is projected to increase to 2.5 billion by the year 2100.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. Finally, the fifth step is to evaluate the results of the project. This involves comparing the actual outcomes against the objectives and goals to determine the effectiveness of the project.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. Two vertical dashed lines run down the center of the page, creating a narrow central column. The paper appears to be from a notebook or a form designed for organized writing. There are no markings, text, or drawings on the page.

[illegible]

1. The first part of the report is a general description of the project. It includes the title, the objectives, the scope, and the methodology. The title is "A Study of the Effect of Temperature on the Rate of Reaction of Hydrogen Peroxide with Potassium Iodide". The objectives are to determine the effect of temperature on the rate of reaction and to determine the activation energy of the reaction. The scope is to study the reaction at temperatures ranging from 10°C to 40°C. The methodology is to use a colorimetric method to measure the rate of reaction.

Temperature (°C)	Rate of Reaction (1/min)
10	0.001
20	0.002
30	0.004
40	0.008

[illegible]

Please consider the areas of investment and uses of income earned. Some probable decisions in the investment and earned income utilization areas might be: minimum summer living expenditures, savings for some purpose or investment, how much to save or invest, types of investments made (savings, insurance, education, automobile purchase, other major purchases), etc. Please list on the chart below your decisions (one in each box).

[illegible]

The following information was obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of California.

The land is located in the County of [County Name], State of California, and is situated in the [Section Number] of the [Township Number] North, [Range Number] East, [Meridian Number] North, [County Name] County, State of California.

The land is described as follows: [Detailed description of the land, including its size, location, and any other relevant information.]

Section	Township	Range
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
24	1	1
25	1	1
26	1	1

[illegible]

Please consider the area of leisure. As a consequence of your occupational choice, some probable decisions in the leisure area might be: time that is spent for leisure, types of leisure time activities in which you participated (recreation, creative arts, hobbies), etc. Please list on the chart below your decisions (one in each box).

[illegible]

[illegible]

[illegible]

[illegible]

PART III

Let's go back and look at all these decision areas again, but this time consider the areas or parts all together as a whole. Would you now trace your decisions in a time sequence. Place the number 1 in the Sequence Number column next to the decision that was made first after making the major occupational choice. Place number 2 by the second decision made after making the major occupational choice. Proceede numbering in this manner until every decision that is written on the charts has a Sequence Number beside it. The last or highest number written down should be the decision that was made the furthest time wise from the major occupational choice.

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APPENDIX B

CRITERIA FOR DECISION PROFILE REPRESENTATION

I COMBINATION OF DECISION CLASSES ON DECISION PROFILE

<u>Decision Classes</u>	<u>Respondent Number</u>
Tactical, Program, Policy, Control, X	52
Tactical, Program, Policy, X	48
Tactical, Program, Policy, Control	9
Tactical, Program, Policy	32
Tactical, Program	59

II COMBINATION OF LINKAGE FORMS ON DECISION PROFILE

<u>Linkage Forms</u>	
Single Radial	23
Single Radial, Multiple Radial	55
Single Radial, Inverted Radial	26
Single Radial, Compound	73
Single Radial, Single Series	54
Single Radial, Multiple Series	21
Single Radial, Single Series, Multiple Series	33
Single Radial, Multiple Radial, Single Series	39
Single Radial, Multiple Radial, Multiple Series	46
Single Radial, Multiplex Radial, Multiple Series	51
Single Radial, Inverted Radial, Multiple Series	64
Single Radial, Multiple Radial, Single Series, Multiple Series	3
Single Radial, Inverted Radial, Single Series, Multiple Series	8
Single Radial, Multiple Radial, Inverted Radial, Compound	27
Single Radial, Multiple Radial, Single Series, Compound	15
Single Radial, Multiple Radial, Multiple Series, Compound	57
Single Radial, Multiple Radial, Single Series, Multiple Series, Inverted Radial	43

LINKAGE FORMS

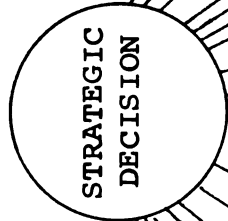
DECISION PROFILE

- 1 Single Class Series
- 2 Multiple Class Series
- 18 Single Radial
- 1 Multiple Radial
- Multiple Radial
- Inverted Radial
- Compound
- 22 Total

RESPONDENT NUMBER

3

- T Tactical 11
- P Policy 7
- C Control 10
- R Program
- X Unreported
- Total 28



1	T10 T14 T16 T28 T15	R8 T9 R12	P20 P21 P22 T23 P18	R1 R25	T2 T3 R26 R27	R4 R5 T6	
2		R13	T19 P17 P24			P7	
3			R11				
4							
5							

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of Band
Transportation
Leisure
"On the Job"
Other

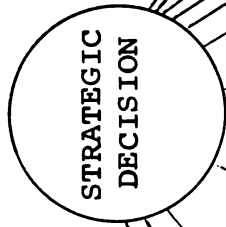
LINKAGE FORMS

DECISION PROFILE

RESPONDENT NUMBER 9

- 1 Single Class Series
- 8 Multiple Class Series
- 2 Single Radial
- 2 Multiple Radial
- Multiple Radial
- Inverted Radial
- Compound
- 11 Total

- DECISION KEY
- T Tactical 4
 - P Policy 2
 - C Control 1
 - R Program 12
 - X Unreported
 - Total 19



1	T ₄	T ₁	R ₅	P ₃	R ₂	R ₁₂	R ₁₄	R ₁₅	R ₁₆		
2	T ₁₁	T ₁₈	R ₆	R ₉	P ₁₀	R ₇	R ₈		C ₁₇		
3											
4											
5											

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of
Transportation
Leisure
"On the Job"
Other

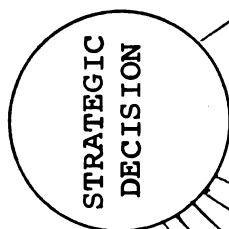
DECISION PROFILE

RESPONDENT NUMBER 15

- LINKAGE FORMS
- 2 Single Class Series
 - Multiple Class Series
 - 5 Single Radial
 - 1 Multiple Radial
 - Multiple Radial
 - Inverted Radial
 - 1 Compound
 - 9 Total

DECISION KEY

- T Tactical 11
- P Policy 7
- C Control
- R Program 1
- X Unreported
- Total 19



1	T5 T6 T12	T1 T2 T14 T4	T10 P15 R16	P13 P11 P19	T17 T18			
2				P7				
3				P8 T3				
4				P9				
5								

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of
Transportation
Leisure
"On the Job"
Other

LINKAGE FORMS

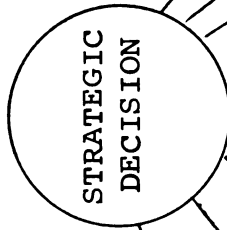
DECISION PROFILE

RESPONDENT NUMBER 21

- 2 Single Class Series
- 5 Multiple Class Series
- Single Radial
- Multiple Radial
- Multiplex Radial
- Inverted Radial
- Compound
- 7 Total

DECISION KEY

- T Tactical
- P Policy
- C Control
- R Program
- X Unreported
- Total



1	T ₄	R ₁	P ₂	R ₅	R ₈	R ₉	R ₇	
2	T ₃			P ₆				
3								
4								
5								

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of Band
Transportation
Leisure
"On the Job"
Other

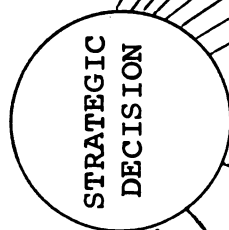
DECISION PROFILE

RESPONDENT NUMBER 23

LINKAGE FORMS
Single Class Series
Multiple Class Series

14	Single Radial	8
	Multiple Radial	
	Multiplex Radial	
	Inverted Radial	
14	Compound	6
	Total	14

DECISION KEY	
T	Tactical
P	Policy
C	Control
R	Program
X	Unreported
	Total

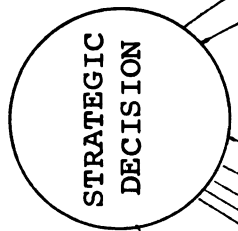


1	T2 T3 T4	R8	T14	T1	R9 R10 R11 R12	T4 T5 T7	T13
2							
3							
4							
5							

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of Band
Transportation
Leisure
"On the Job"
Other

LINKAGE FORMS		D E C I S I O N P R O F I L E		RESPONDENT NUMBER	27
Single Class Series					
Multiple Class Series					
Single Radial					
Multiple Radial					
Multiplex Radial					
Inverted Radial					
Compound					
Total					

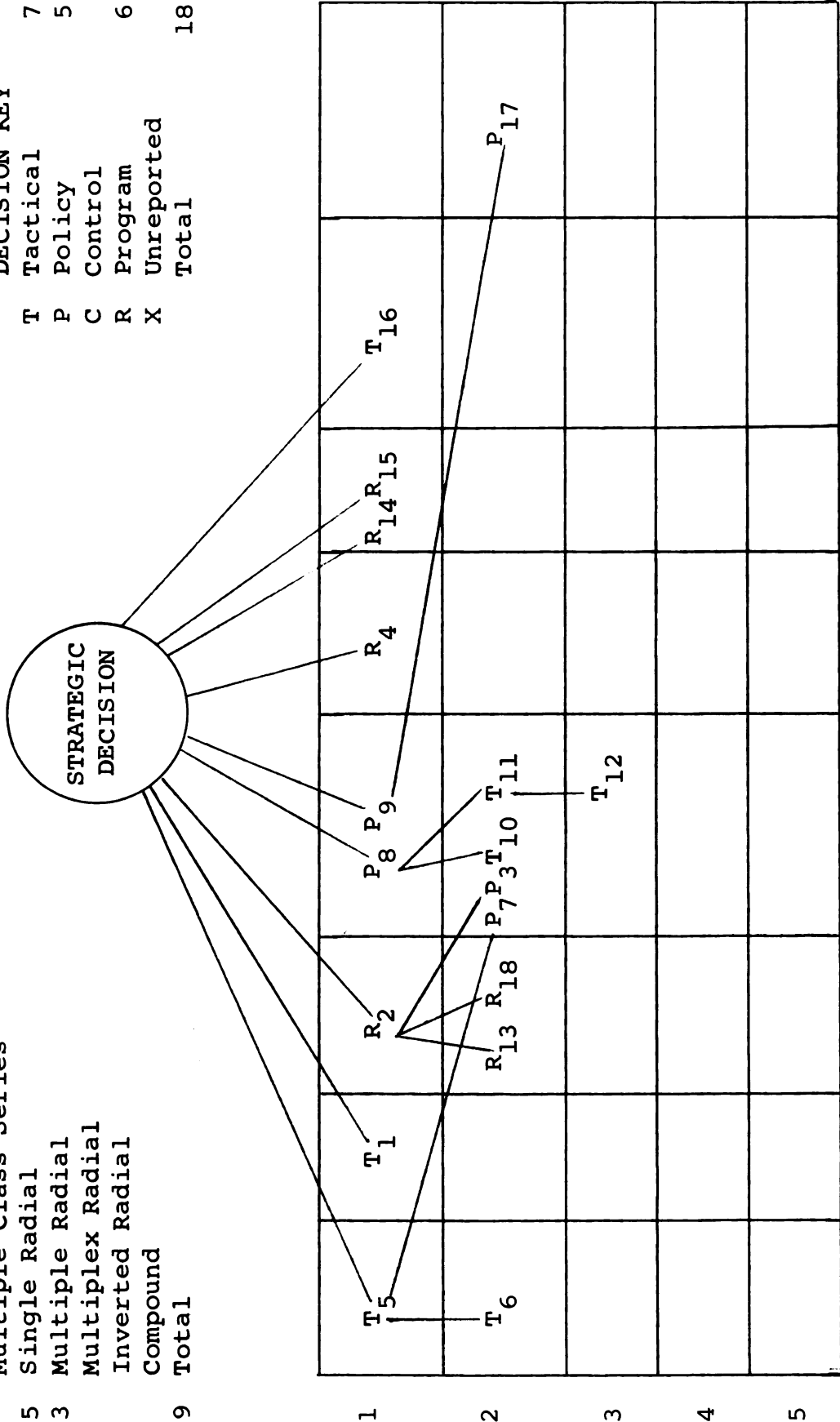
DECISION KEY	
T	Tactical
P	Policy
C	Control
R	Program
X	Unreported
	Total



1	T ₂	T ₁ P ₄ R ₁₁	R ₁₇ R ₁₈				
2	T ₆ T ₇	T ₃	R ₁₄ R ₁₅	R ₁₆ R ₁₂			
3		R ₉	R ₁₀ R ₁₃				
4							
5							

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of Band
Transportation
Leisure
Other

LINKAGE FORMS		D E C I S I O N P R O F I L E		RESPONDENT NUMBER	32
1	Single Class Series				
5	Multiple Class Series				
3	Single Radial				
	Multiple Radial				
	Multiplex Radial				
	Inverted Radial				
9	Compound				
	Total				
				DECISION KEY	
				T	Tactical
				P	Policy
				C	Control
				R	Program
				X	Unreported
					Total
					18



No. of Band
Clothing
Housing
Meals and
Maintenance
Investments
and Uses of
Transportation
Leisure
"On the Job"
Other

LINKAGE FORMS

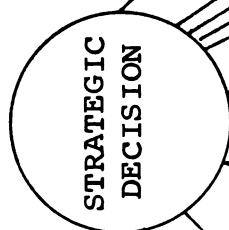
DECISION PROFILE

RESPONDENT NUMBER 33

- 3 Single Class Series
- 1 Multiple Class Series
- 6 Single Radial
- Multiple Radial
- Multiple Radial
- Inverted Radial
- Compound
- 10 Total

DECISION KEY

- T Tactical 7
- P Policy 1
- C Control 2
- R Program 8
- X Unreported
- Total 18



1	T ₇	T ₁	R ₈	T ₄	R ₁₄	R ₁₅	R ₁₆	R ₁₇	P ₁₈					
2					R ₂			R ₁₃						
3	T ₆			T ₉	T ₃	T ₅								
4				C ₁₀										
5				C ₁₁										
				R ₁₂										

No. of Band
Clothing Housing
Meals and
Maintenance
Investments
and Uses of
Transportation
Leisure
"On the Job"
Other

LINKAGE FORMS

1 Single Class Series

2 Multiple Class Series

2 Single Radial

1 Multiple Radial

Multiple Radial

Inverted Radial

Compound

6 Total

DECISION PROFILE

RESPONDENT NUMBER 39

DECISION KEY

T Tactical 4

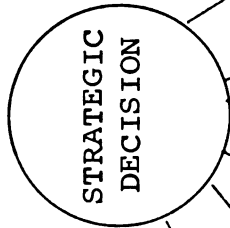
P Policy 2

C Control 5

R Program

X Unreported

Total 11



1	T ₆	R ₉	P ₄	R ₁	R ₃	R ₁₁		
2	T ₇ T ₈	R ₁₀	T ₅	P ₂				
3								
4								
5								

No. of Band

Clothing Housing Meals and Investments · Transpor- Leisure "On the Job" Other

of Maintenance and Uses of tation

Band nance Earned Income

LINKAGE FORMS

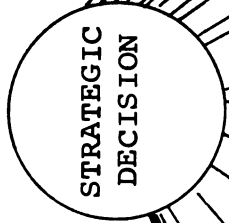
DECISION PROFILE

RESPONDENT NUMBER 43

- 1 Single Class Series
- 1 Multiple Class Series
- 16 Single Radial
- 2 Multiple Radial
- Multiple Radial
- 1 Inverted Radial
- Compound
- 21 Total

DECISION KEY

- T Tactical 17
- P Policy 6
- C Control
- R Program 8
- X Unreported
- Total 31



DECISION PROFILE

RESPONDENT NUMBER 46

LINKAGE FORMS

Single Class Series

1 Multiple Class Series

16 Single Radial

2 Multiple Radial

Multiplex Radial

Inverted Radial

Compound

19 Total

DECISION KEY

Tactical 10

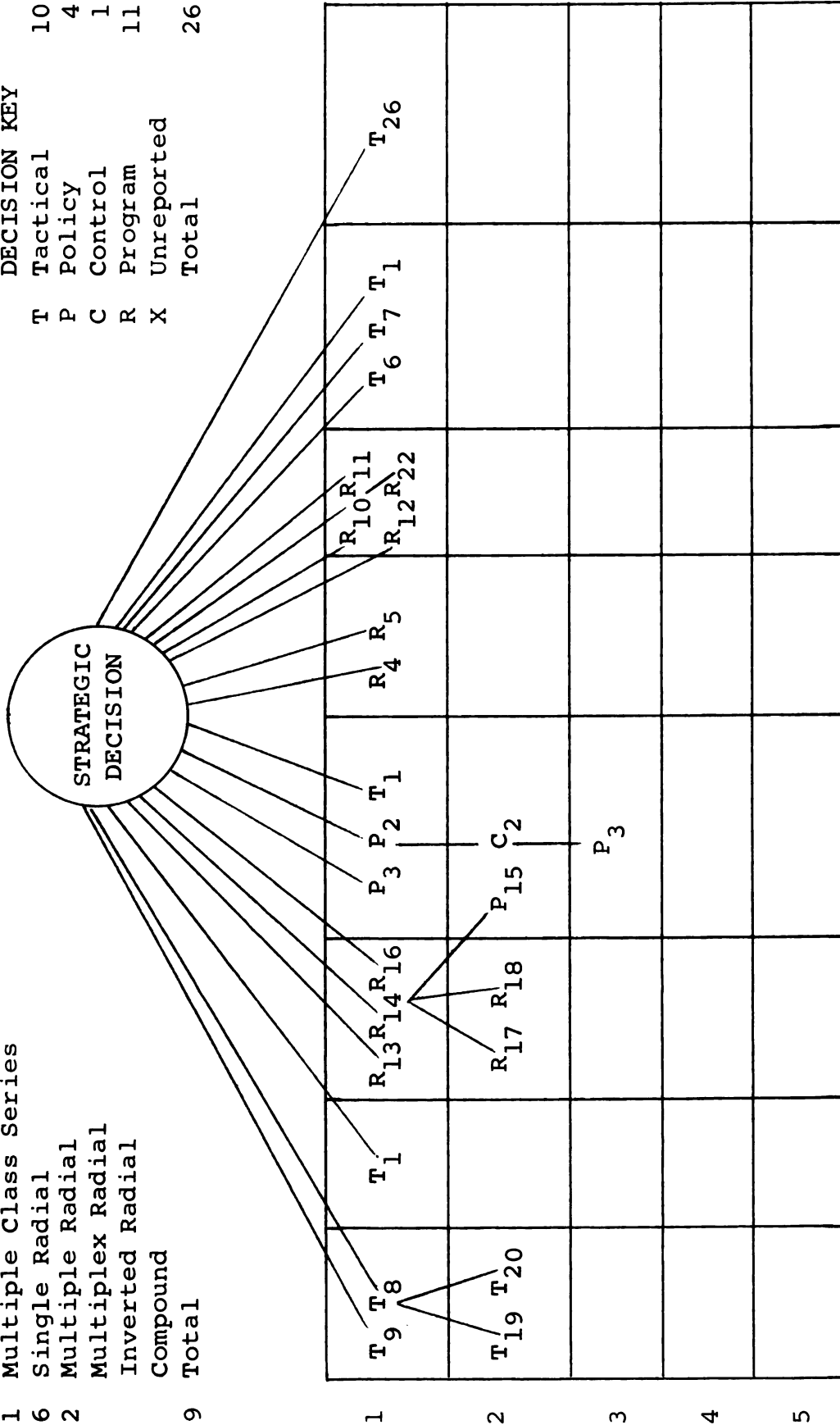
P Policy 4

C	Control	1
1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	0.00	0.00
6	0.00	0.00
7	0.00	0.00
8	0.00	0.00
9	0.00	0.00
10	0.00	0.00
11	0.00	0.00
12	0.00	0.00
13	0.00	0.00
14	0.00	0.00
15	0.00	0.00
16	0.00	0.00
17	0.00	0.00
18	0.00	0.00
19	0.00	0.00
20	0.00	0.00
21	0.00	0.00
22	0.00	0.00
23	0.00	0.00
24	0.00	0.00
25	0.00	0.00
26	0.00	0.00
27	0.00	0.00
28	0.00	0.00
29	0.00	0.00
30	0.00	0.00
31	0.00	0.00
32	0.00	0.00
33	0.00	0.00
34	0.00	0.00
35	0.00	0.00
36	0.00	0.00
37	0.00	0.00
38	0.00	0.00
39	0.00	0.00
40	0.00	0.00
41	0.00	0.00
42	0.00	0.00
43	0.00	0.00
44	0.00	0.00
45	0.00	0.00
46	0.00	0.00
47	0.00	0.00
48	0.00	0.00
49	0.00	0.00
50	0.00	0.00
51	0.00	0.00
52	0.00	0.00
53	0.00	0.00
54	0.00	0.00
55	0.00	0.00
56	0.00	0.00
57	0.00	0.00
58	0.00	0.00
59	0.00	0.00
60	0.00	0.00
61	0.00	0.00
62	0.00	0.00
63	0.00	0.00
64	0.00	0.00
65	0.00	0.00
66	0.00	0.00
67	0.00	0.00
68	0.00	0.00
69	0.00	0.00
70	0.00	0.00
71	0.00	0.00
72	0.00	0.00
73	0.00	0.00
74	0.00	0.00
75	0.00	0.00
76	0.00	0.00
77	0.00	0.00
78	0.00	0.00
79	0.00	0.00
80	0.00	0.00
81	0.00	0.00
82	0.00	0.00
83	0.00	0.00
84	0.00	0.00
85	0.00	0.00
86	0.00	0.00
87	0.00	0.00
88	0.00	0.00
89	0.00	0.00
90	0.00	0.00
91	0.00	0.00
92	0.00	0.00
93	0.00	0.00
94	0.00	0.00
95	0.00	0.00
96	0.00	0.00
97	0.00	0.00
98	0.00	0.00
99	0.00	0.00
100	0.00	0.00

R Program 11

X Unreported

Total 26



No.	Clothing	Housing	Meals	and	Investments	Transpor -	Leisure	"On the Job"	Other
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Maintenance and Uses of tation

Finance Earned Income

Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

DECISION PROFILE

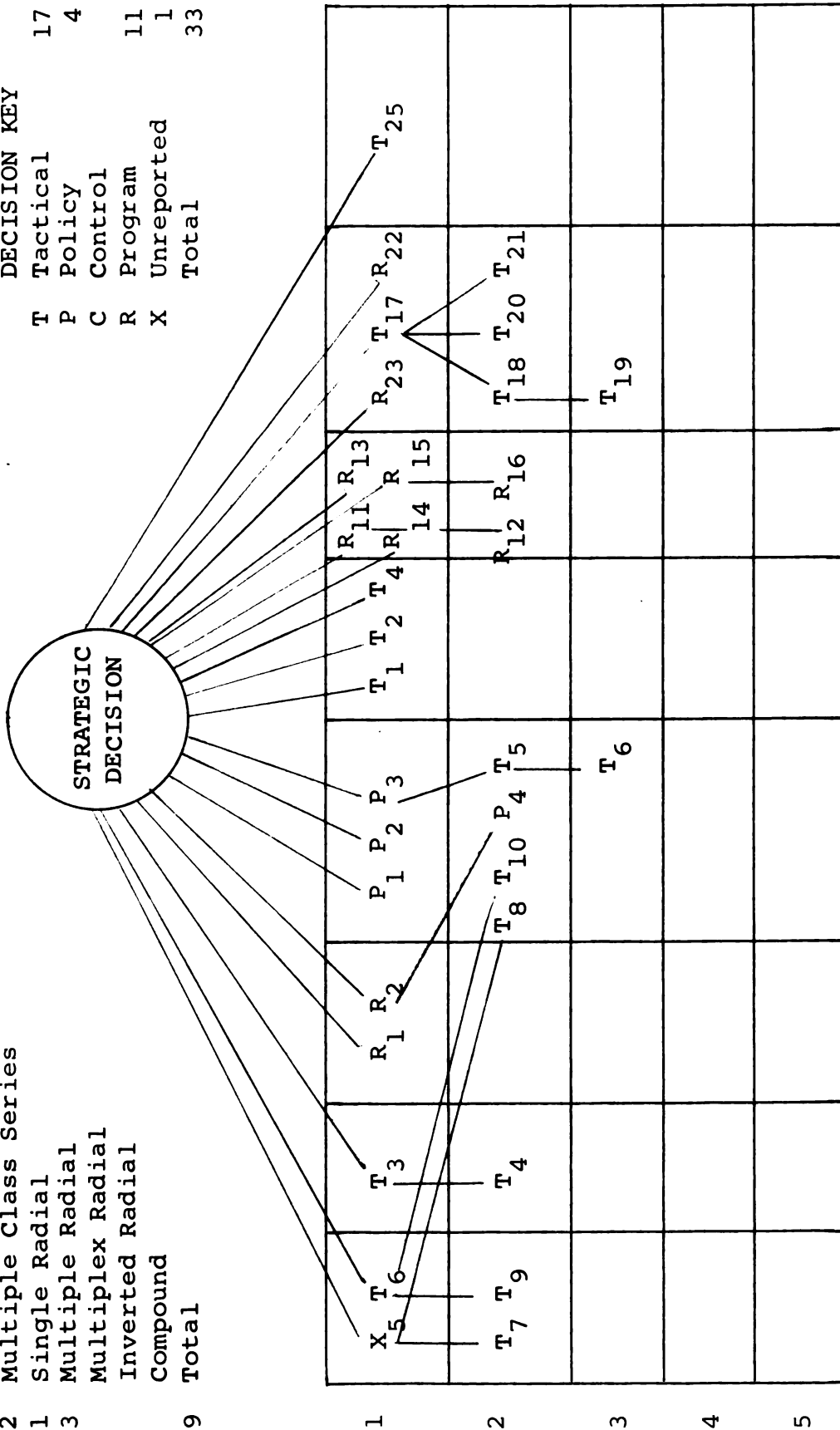
RESPONDENT NUMBER 48

LINKAGE FORMS

- | | |
|----|-----------------------|
| 3 | Single Class Series |
| 2 | Multiple Class Series |
| 11 | Single Radial |
| 3 | Multiple Radial |
| | Multiplex Radial |
| | Inverted Radial |
| | Compound |
| 19 | Total |

DECISION KEY

- | | | |
|---|------------|----|
| T | Tactical | 17 |
| P | Policy | 4 |
| C | Control | |
| R | Program | 11 |
| X | Unreported | 1 |
| | Total | 33 |

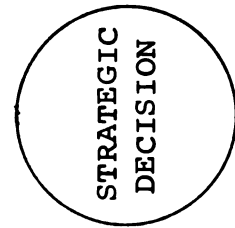


Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

- LINKAGE FORMS
- Single Class Series
 - 2 Multiple Class Series
 - 9 Single Radial
 - Multiple Radial
 - 1 Multiplex Radial
 - Inverted Radial
 - Compound
 - 12 Total

D E C I S I O N P R O F I L E

RESPONDENT NUMBER 51



DECISION KEY

- T Tactical 8
- P Policy 6
- C Control
- R Program 5
- X Unreported
- Total 19

1	T ₁	P ₁ P ₂	P ₁ P ₂	R ₁	R ₁ R ₂ R ₃	P ₁	T ₁
2	T ₁ T ₂ T ₃	P ₁ P ₂ P ₃					
3	T ₂ T ₃ T ₄ T ₅						
4							
5							

No. of Band
Clothing Housing Meals and Investments Transpor- Leisure "On the Job" Other
of Maintenance and Uses of tation
Band nance Earned Income

Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

LINKAGE FORMS

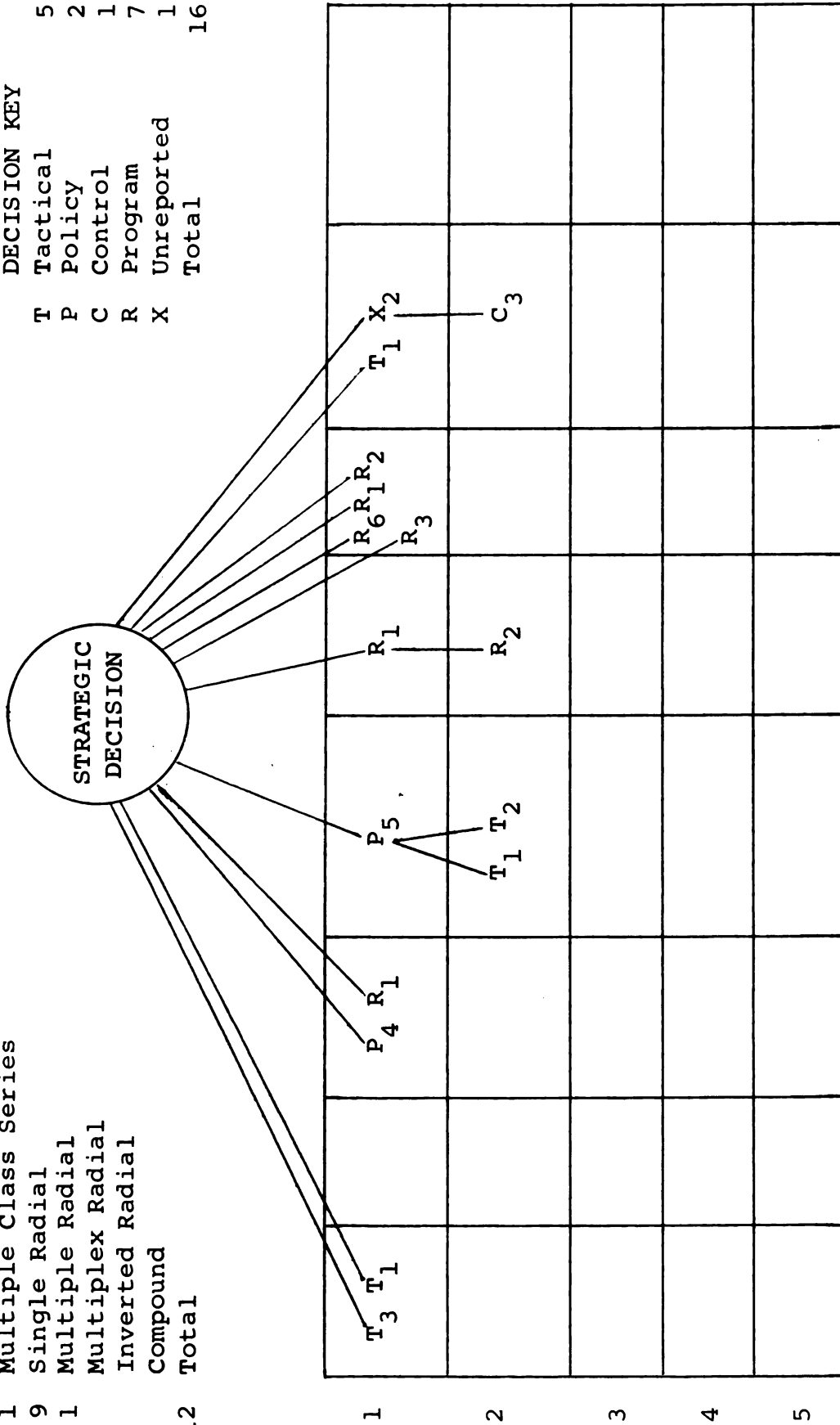
DECISION PROFILE

RESPONDENT NUMBER 52

- 1 Single Class Series
- 1 Multiple Class Series
- 9 Single Radial
- 1 Multiple Radial
- Multiple Radial
- Inverted Radial
- Compound
- 12 Total

DECISION KEY

- T Tactical 5
- P Policy 2
- C Control 1
- R Program 7
- X Unreported 1
- Total 16

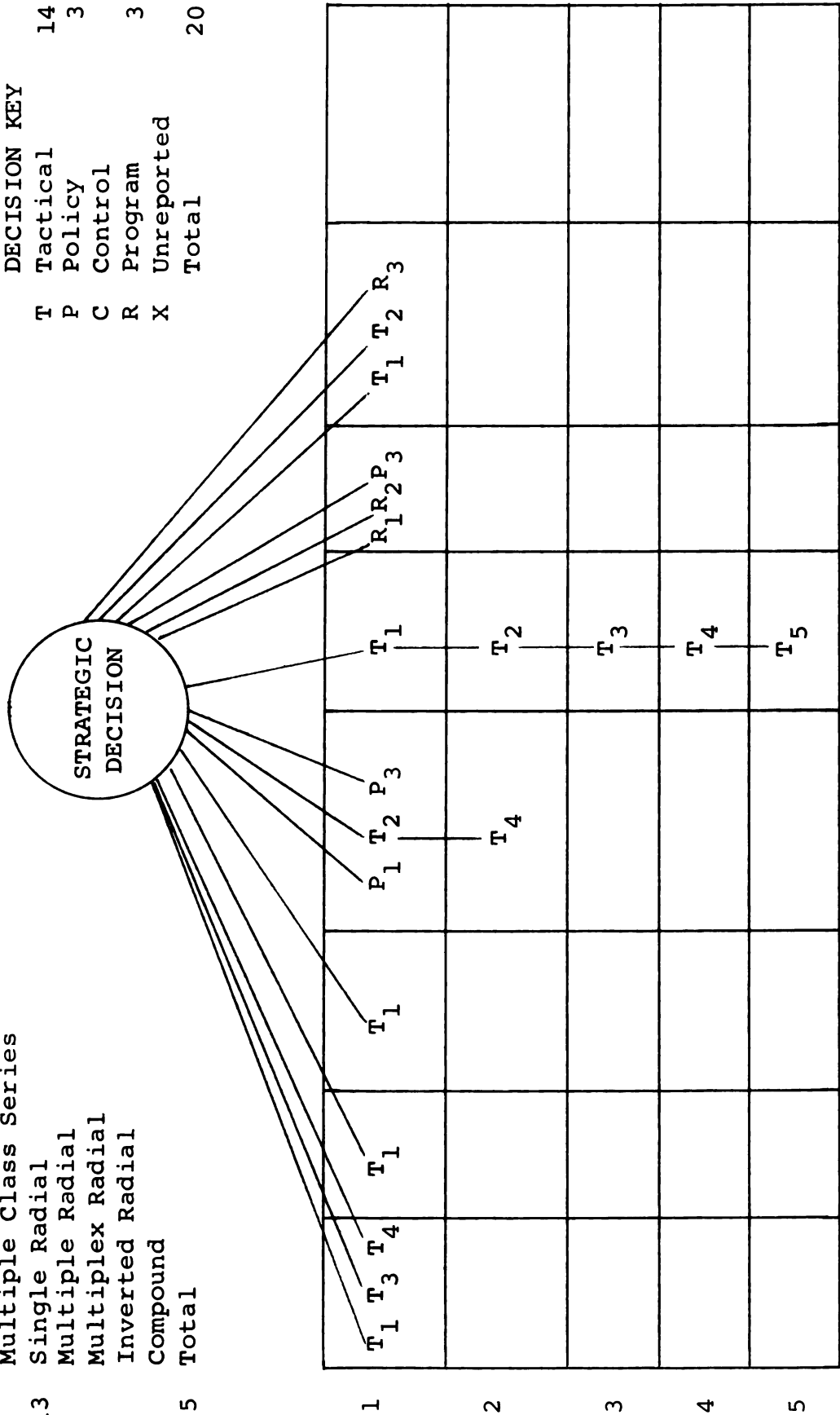


No. of Band Clothing Housing Meals and Investments Transpor- Leisure "On the Job" Other

Mainte- nance and Uses of tation
Earned Income

Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

LINKAGE FORMS		D E C I S I O N P R O F I L E		RESPONDENT NUMBER	54
2	Single Class Series				
13	Multiple Class Series				
	Single Radial				
	Multiple Radial				
	Multiplex Radial				
	Inverted Radial				
	Compound				
15	Total				
		DECISION KEY			
		T	Tactical		14
		P	Policy		3
		C	Control		
		R	Program		3
		X	Unreported		
			Total		20



No. of Band
Clothing
Housing
Meals
and
Maintenance
Investments
and
Uses
of
Earned
Income
Transportation
Leisure
"On the Job"
Other

Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

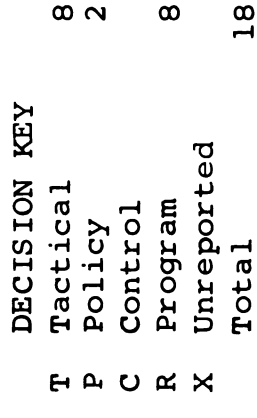
LINKAGE FORMS

DECISION PROFILE

RESPONDENT NUMBER 55

14	Single Class Series	8
1	Multiple Class Series	2
	Single Radial	8
	Multiple Radial	18
	Inverted Radial	
	Compound	
15	Total	

DECISION KEY	
T	Tactical
P	Policy
C	Control
R	Program
X	Unreported
	Total

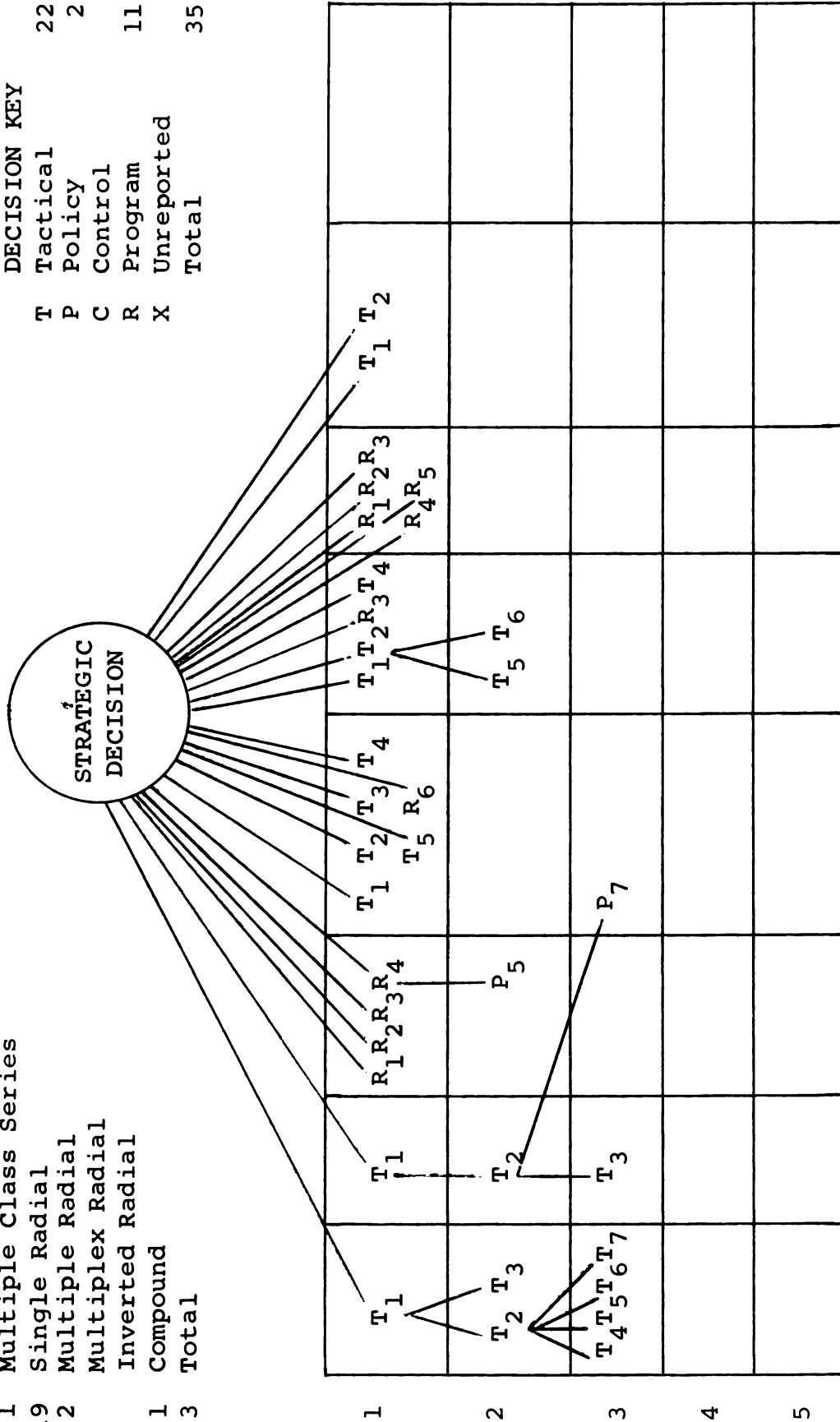


1	T ₁ T ₂	T ₁	R ₁	P ₁	R ₁	R ₂ R ₃ R ₄ R ₅ R ₆	P ₁ T ₂ T ₃	
2								
3								
4								
5								

No. of Band
Clothing Housing Meals and Maintenance
Investments and Uses of Income
Transportation
Leisure
"On the Job"
Other

Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

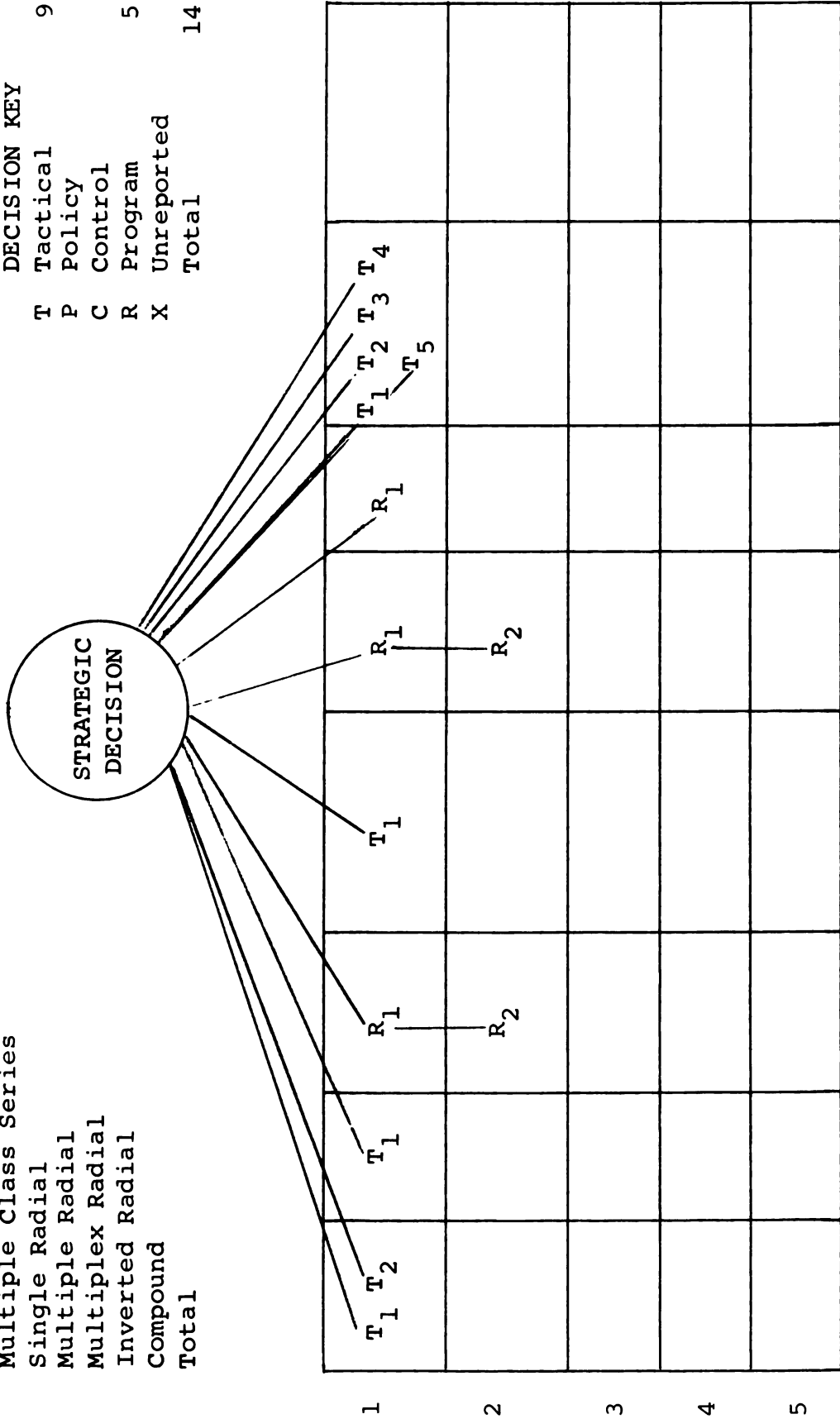
LINKAGE FORMS		D E C I S I O N P R O F I L E		RESPONDENT NUMBER	57
Single Class Series					
1	Multiple Class Series				
19	Single Radial				
2	Multiple Radial				
	Multiplex Radial				
	Inverted Radial				
1	Compound				
23	Total				
		DECISION KEY			
		T Tactical		22	
		P Policy		2	
		C Control			
		R Program		11	
		X Unreported			
		Total		35	



No. of Band
 1. Clothing Housing
 2. Meals and Maintenance
 3. Investments and Uses of Income
 4. Transpor-
 5. Leisure tation
 Other

Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

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No. of Band
Clothing
Housing
Meals and
Maintenance
Investments
and Uses of
Earned Income
Transportation
Leisure
"On the Job"
Other

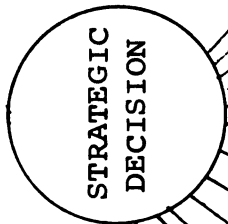
Respondent's decision sequence was incomplete; researcher numbered decisions within task areas in the order reported.

LINKAGE FORMS

DECISION PROFILE

RESPONDENT NUMBER 64

3	Multiple Class Series	DECISION KEY	
11	Single Radial	T Tactical	9
	Multiple Radial	P Policy	4
1	Inverted Radial	C Control	8
15	Compound	R Program	
	Total	X Unreported	21



1	T ₁ T ₂ T ₃	T ₁	P ₁ R ₂	P ₁ R ₂ P ₅	R ₁ T ₂	R ₁ P ₂ R ₃		
2	T ₄ R ₆				P ₃	R ₄		
3	R ₅							
4								
5								

No. of Band
Clothing Housing Meals and Investments
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Leisure
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