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THE SEASONAL HOME LOCATION DECISION PROCESS: TOWARD A DYNAMIC MODEL

By

Susan Irish Stewart

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ABSTRACT

THE SEASONAL HOME LOCATION DECISION PROCESS: TOWARD A DYNAMIC MODEL

By

Susan Irish Stewart

Seasonal home use has strong ties to tourism, recreation, and retirement location decisions. Consequently, choosing a seasonal home can have long term consequences both for its owner and for the host community. Because most decision research focuses on simple consumer purchases, little is known about how people cope with major decisions such as the purchase of a seasonal home that require long term committments of time and money. A field study of seasonal home location decision making was conducted using a combination of methods. Retrospective verbal protocols were conducted to generate descriptions of a few seasonal home buyers' decision processes. Decision makers typically spent 3-5 years, and sometimes as long as 10 years, searching for a seasonal home. The search and evaluation techniques they used were both diverse and flexible. Conceptual models of complex decision making and its temporal dimensions were developed from these interviews. In the model of complex decision making, a decision frame shaped by the decision maker's situation and by the decision environment directs search and evaluation behavior. Temporal dimensions of decision making are captured in 3 sequential stages of decision making activity, though changes in the decision environment can alter their sequence. A two stage panel survey was used to further explore both models. Sampling seasonal home buyers through real estate agencies generated a non-probability sample with diverse incomes, career stages, recreational interests, and seasonal home preferences. Results indicate support for the concepts of decision framing, and for movement across decision making stages. Extensive individual variation was observed in decision making. Choice sets were open ended and evolved over the course of the decision process. Preferences for property attributes were more likely to change than were preferences for attributes of seasonal home areas.

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CHAPTER ONE

INTRODUCTION

Decision making involves a complex sequence of events which take place when an individual is faced with more than one alternative or course of action. The process of choosing one alternative over others involves making a series of decisions in which an individual's motivations, preferences, knowledge, cognitive processes, resources, and constraints all play a role.

One of the most routine settings for decision making is shopping for and purchasing consumer goods. On a daily basis, consumers make decisions regarding how to allocate their limited resources among many alternative goods and services. Studying the consumer's decision making process and its outcome provides insights into preferences for the different features or attributes of goods and services offered, and indicates how the consumer acts on his or her preferences.

Although not usually considered consumer products, natural environments may provide services alone (e.g., a forest for hiking) or in combination with other products and services (e.g., an ocean cruise). Decision making research can be used to determine how important natural resources are in a consumer's overall evaluation of such a product, or to determine how a consumer chooses one natural setting over another. Because formal markets rarely exist for amenity resources, decision making research in this context is especially valuable in that information normally inferred from market activities, such as consumer preference and willingness to pay for resources, can be discovered.

A seasonal home is an example of a product which combines natural resource amenities (wooded lots, panoramic views) and a consumer good (housing) into a complex product. A ***seasonal home*** is defined here as ***a residential structure used by its owner on a part time basis for recreational purposes***. It is termed a seasonal home because its use

will tend to coincide with the seasonal tourism cycles in a region (e.g., summers and winter ski seasons in northern areas, late winter-early spring in southern areas). It may be owned by an individual, family, or group.

The decision making process associated with purchasing a seasonal home is unique. For most households, it will be second in price only to the purchase of a primary home, and may be owned and used for as long, or longer. Durable goods are defined by the U.S. Department of Commerce as those that last for at least 3 years; seasonal homes are typically owned and used for a much longer period, making them a sort of "super durable" good. Because they are super durables, it is rare to purchase more than one seasonal home in a lifetime, and few individuals ever become experienced seasonal home buyers. Most other purchases will involve decision makers with a range of experience; for the seasonal home purchase, the majority of decision makers will be novices.

While permanent home location is constrained by place of work and family ties, the number of available seasonal home locations (ie., the universal choice set) is practically infinite. Real estate developers may aggressively market certain developments as "seasonal home areas", but a decision maker's preferences for natural and social settings, recreational activities, their willingness to travel, and their financial resources will have more to do with determining what is and is not a seasonal home area.

The decision maker is faced with a virtually infinite set of homes to choose from, and is likely to know about only a small subset of that universal choice set at the beginning of the decision process. Due to the absence of time pressure, the complexity of the potential choice set, and a lack of experience, most decision makers can be expected to take much longer to purchase a seasonal home than they would to purchase other major goods. During this time, the decision environment will change, making it difficult to predict when a choice will be made, or what form the decision process will take.

Seasonal home location decision making is of practical importance to communities and natural resource managers in amenity areas. Seasonal homes are an increasingly important determinant of population in amenity areas. In heavily forested areas of northern lower Michigan, seasonal homes account for between 30% and 60% of all housing units (Spotts, 1991). The implications of continued growth in seasonal home areas are potentially wide ranging, including pressures on community services and facilities, and changes in community attitudes. Most seasonal home owners come from metropolitan areas, often bringing attitudes, values, and recreational preferences that are different from those of permanent home owners (Marans & Wellman, 1978).

This thesis presents the results of a study of the decision making process associated with the purchase of seasonal homes. The study will explore how consumers learn about, evaluate, and choose a seasonal home location over time. It will also investigate the influence of forest and other natural resource amenities in that choice.

The Study of Decision Making

Decision making models provide a framework for studying the variables that influence purchase decisions. Numerous methods of measuring the cognitions and behaviors associated with decision making have been developed as well. Because of their usefulness in understanding purchase decisions, these models and methods have been repeatedly applied, refined, and advanced in numerous studies of consumer behavior.

One widely used method is the conjoint choice model (Louviere, 1988). This model allows prediction of a consumer's choice based on the attributes of the alternatives s/he is choosing among, and assumptions about how perceptions of the attributes are combined to form overall evaluations. Conjoint choice models, combining conjoint scaling techniques and probabilistic discrete choice models, have been applied in a variety of recreation and tourism contexts. Examples include predicting park visitation (Louviere & Timmermans, 1990b), the influence

of park management options on recreation site choice (Lieber & Fesenmair, 1984), and vacation destination choice (Goodrich, 1978; Haider & Ewing, 1990).

While such models are useful for predicting choice and for determining preferences for attributes of the alternatives, they focus strictly on the final stage of the decision process, ignoring the events, judgements and cognitions that occur before the consumer makes a choice. For purposes of understanding preferences for and choices of amenity resources and other non-market goods, these early stages of decision making, where learning occurs and preferences are formed and changed, are equally important.

The structure of a conjoint choice model suggests that choices are instantaneous, with individuals choosing among a finite and fixed set of alternatives by evaluating the alternatives across a set of attributes, employing a simple mental calculus to determine the overall utility of each alternative, and then choosing the alternative with the greatest utility. Some researchers (e.g., Nisbett & Ross, 1980) question how realistic such models are in light of a wealth of literature suggesting that individuals are satisficers rather than optimizers (Simon, 1955), employ a wide variety of decision making heuristics or short cuts (Tversky & Kahneman, 1974), and more generally are not entirely "rational", in the sense of behaving as a normative decision making model would suggest they should (Abelson & Levi, 1985; Nisbett & Ross, 1980).

An alternative approach to studying decision making is to use process tracing methods, such as verbal protocols (Ericsson & Simon, 1984). These methods do not predict the final choice the consumer will make, but rather explore how the choice is made. The verbal protocol method is used to generate a record of the series of cognitions, judgements, and decisions leading up to the final choice. Like conjoint choice models, process tracing techniques have been used to study many different decision processes and to explore information search, choice

set formation, and rules for information processing and evaluation (Abelson & Levi, 1985; Montgomery & Svenson, 1989; Payne, 1976). Vining and Fishwick (1991) have applied process tracing methods in recreational settings.

Problem Statement

Although the development and use of seasonal homes is often of vital concern to many groups, including those involved in public land management, local and regional planning, and community and economic development, little is known about the factors that drive demand for seasonal homes. Without more information about why and how people choose the locations they do for their seasonal homes, the groups they impact by their choices must rely on reaction to trends in seasonal home concentrations and use, rather than anticipation and planning.

Unlike most purchase settings in which decision research has been used, the seasonal home purchase is a complex decision, and one that is likely to require a large portion of the consumer's budget. Studies of decision making involving major, non-routine purchases are rare. Choice modeling and process tracing studies of decision making share a history of almost exclusive application to simple, short term, routine decision processes. The item being chosen or purchased is typically one that the consumer is familiar with, and most are not significant items in a consumer's overall budget.

There is little justification for assuming that long, complex, and unique decision processes parallel those associated with simpler purchases. Major decisions such as the purchase of a seasonal home may be made, postponed, or structured over extended periods of time. These decisions involve a significant temporal component in that problem definition, information search, choice set development, attribute selection, perceptions and evaluations, and the determination of when to finally make the purchase (if at all) are worked out over time. In these situations, parameters of the choice process may be changing over time in response to endogenous and exogenous factors. Adapting decision

making models and methods to complex, long term decision making can provide a means of learning more about the decision process in general. It can also provide new insights for marketing complex goods and services.

The study of seasonal home location decision making will provide more knowledge of the factors that lead to the choice of a given seasonal home area. By investigating the role of tourism, visits to friends and relatives, recreational preferences, family life cycle, retirement planning, natural resources, and other factors in the seasonal home location decision, this study will provide planners and managers with a better understanding of the factors driving seasonal home growth. The seasonal home location decision also presents opportunities to evaluate the importance of recreation and natural resources in residential choice when the constraints posed by employment are removed. The role of natural resources and the amenities they provide, such as recreation and scenic beauty, can be better understood in the context of the seasonal home purchase.

Study Objectives

The purpose of this study is to extend decision making research by developing a theoretical structure appropriate for complex choice, and to use the model to study seasonal home choice in order to learn more about seasonal home decision making.

There are 3 objectives for this study:

1. Assess the relevance of existing decision making literature to complex choice.
2. Identify, extend, and/or develop appropriate methods for studying the seasonal home decision process.
3. Identify the seasonal home decision process, including its (a) determinants, (b) temporal dimensions, and (c) structure.

This study begins with a review of a wide range of decision making literature (Chapter 2), aimed at determining how existing theories and research methods treat complex decision making. Semi-structured

interviews with seasonal home buyers provide some important initial information about the nature of seasonal home decision making and choice (Chapter 3). A conceptual model of complex choice is developed in Chapter 4. Chapter 5 covers methods and descriptive results of a longitudinal survey of seasonal home buyers, and in Chapter 6, the temporal and dynamic elements of the study are presented. Conclusions, practical implications, and research recommendations are discussed in Chapter 7.

CHAPTER TWO

LITERATURE REVIEW

Seasonal Homes

Most efforts to understand seasonal home ownership and use stem from concerns about the host community's ability to cope with the effects of seasonal home development. Research has focused primarily on identifying physical and social impacts of seasonal home development and use. Some studies have addressed environmental problems specific to seasonal homes (Gamble, Cole, Bevins, Derr, & Tobey, 1975; Marans & Wellman, 1978). More general research on the social impacts of population growth and change in rural areas addresses issues relevant to seasonal homes, such as increased pressure on institutions and public services, and the potential clash of cultures as urban residents move to rural areas (DeJong & Humphreys, 1976; Price & Clay, 1980).

Recent research indicates that seasonal home use may also have subtle, long range effects on the host community. In a study of Illinois residents, Oldakowsi and O'Rourke (1991) demonstrate a relationship between travel activity and retirement location choice, where travel plays a role in helping people become familiar with possible retirement locations. Seasonal home use can be seen as a form of vacation travel that typically involves longer stays, repeat visits, and more integration into a community, suggesting that it has even greater influence on retirement location choice (Stynes & Olivo, 1990). During the 1970's, large numbers of retirees were drawn to amenity areas, the same rural, resource rich areas that have high concentrations of seasonal homes (Glasgow, 1980; Graff & Wiseman, 1978). As yet, however, there is no concrete evidence of this link between seasonal home use and retirement location decisions.

While existing research shows what can happen once seasonal homes are in place, it does not indicate why seasonal homes are located in

some areas and not in others. Secondary data shows that seasonal homes are concentrated in areas rich with rivers, lakes, forests, and other natural resources (Spotts, 1991). Recreation participation studies suggest that seasonal homes may facilitate certain recreation activities. In a study of Michigan boaters, Stynes and Safronoff (1980) found that 30% of in-state boaters and 80% of those from out of state also owned seasonal homes. These studies, however, are based on existing homes and home owners, and do not indicate how seasonal homes are chosen, how important recreation and natural resources are in the choice of a seasonal home location, or what other factors might also be involved. A better understanding of the seasonal home choice process would give communities a chance to anticipate seasonal home development and attract or discourage it, as they wish.

Decision Making

Decision making is the general term for the study of how an individual arrives at the resolution to some problem or task, and what the nature of that resolution will be. Contributions to decision theory come primarily from economics, psychology, and marketing, while applications can be found in a wide variety of fields, including economics, marketing, cognitive and social psychology, planning, transportation, geography, political science, organizational behavior, management science, and recreation. Common to all of these fields is an interest in how an individual makes decisions and what the nature of those decision will be.

Included under the general heading of decision making are several distinct approaches to understanding or predicting decisions. There are many possible ways of arranging the discipline of decision making into sub-disciplines. The approach used here is adapted from Abelson and Levi (1985). In organizing their review of decision making, they draw a useful distinction between structural and process models:

> ***Structural models*** are concerned with describing the relationship between stimulus and response or between input and output. ***Process models***, in contrast, focus on the

> transformation process that occurs between the stimulus and response (Abelson & Levi, 1985, p. 235, italics theirs).

Structural models are frequently grounded in economic theories of choice, while process models rely more heavily on psychological theories of perception, learning, and judgement. The research objectives and methods used to test the two classes of models reflect these different origins.

The terms ***choice*** and ***decision*** have specific and distinct meanings in decision research. ***Decision*** refers to a sub-task resolution that is part of a larger strategy or path toward the completion of the task of interest; ***choice*** refers to the final purchase decision. As decision making is the topic of study, it is consistent to say that the ***decision process*** is one that involves making a series of decisions. This series of decisions is the focus of process models; the choice it results in is the focus of structural decision research.

Most of this chapter deals with conceptual issues relating to decision making, exploring the variables and relationships as proposed in several models of decision making. The first section reviews structural choice models. The following two sections discuss process models, including the many elements, subprocesses, and relationships which have been investigated in studies of decision making. The theoretical bases for process models are discussed next, and the final section reviews literature relating to the study of dynamic processes.

Structural Models

Structural choice models originated in the fields of economics and mathematical psychology (Hammond, McClelland & Mumpower, 1980). Choice models predict, for a group or an individual, which alternatives will be chosen from a set of possible alternatives. Information Integration Theory (IIT) is the most widely used theoretical basis for modeling choice in recent recreation applications of choice modeling (Louviere & Timmermans, 1990a). As Louviere (1988) explains, IIT "is emphasized because it has a theoretical basis (Anderson, 1970, 1981, 1982) from

which application methods logically follow, and a well-developed error theory to support statistical tests of alternative models of consumer decision making" (p.7).

The IIT preference and choice models now used in marketing, recreation, and planning studies represent one stream of research originating from Anderson's work in cognitive psychology. Anderson was initially concerned with developing a cognitive theory of the formation of judgements. IIT poses a theory and measurement methods for determining how subjective evaluations of multi-attribute alternatives are combined into judgements of those alternatives (Anderson, 1970). In addition to proposing a specific schema for how such integration takes place (ie., cognitive algebra) (Anderson, 1981), Anderson and his collaborators also developed methods for measuring this process (Anderson, 1982). ***Functional measurement*** is the name given to the methods designed to provide valid measures of the stimulus and the response which **function** in a given instance of judgement, recognizing that perception of stimulus and response to it are both context and goal dependent (Anderson, 1990).

Contemporary IIT choice models used in marketing and related fields reflect the many refinements and extensions of IIT's methods developed by Louviere and Woodworth (1982) and by Louviere (1988). Louviere and Woodworth combined functional measurement's use of experimental design with conjoint measurement. ***Conjoint measurement*** is a scaling technique developed by Luce and Tukey (1964; Krantz, 1964) in which the effects of two or more independent variables on a dependent variable are measured and converted into common units. For example, the importance of a seasonal home's **view** and its **distance from permanent home** (the dependent variables) in determining the buyer's **choice** (the independent variable) are scaled in common units, and thus made directly comparable. Conjoint measurement permits understanding of how each variable affects the outcome, and how trade-offs are made between the variables (Fenwick, 1978). In the context of multiattribute judgement

or choice, it provides a means of measuring each attribute's contribution, singly or in combination with other attributes, to the overall assessment of an alternative.

The addition of conjoint scaling to functional measurement allows derivation of a utility function expressing the relative weight an individual assigns to each attribute of the alternatives in the choice set (Louviere, 1988). Because the utility function expresses preference for the attributes of alternatives, rather than for alternatives themselves, predicting choice or preference of alternatives requires a means of mapping attribute level utilities onto choice sets made up of alternatives. This is the role of the choice model (Louviere, 1983).

Choice models are based on the concept of utility maximization, which assumes that an individual chooses the alternative which is most useful or has the highest utility (McFadden, 1974; Thurstone, 1927). Choice models differ in their assumptions about behavior (e.g., the independence from irrelevant alternatives property of logit type models, sources and distribution of errors), the type of data they allow (e.g., discrete or continuous dependent and independent variables) and their mathematical structure (e.g., single equation or nested models) (Ben-Akiva & Lerman, 1987; Srinivasan & Winer, 1990). Choice models commonly used in conjoint choice experiments include logit, multinomial logit, and probit (Louviere & Timmermans, 1990a).

For the purpose of understanding decision making, the major strength of IIT choice models is their ability to discover the utility functions of individuals, or the aggregate utility functions of groups (Hammond et al., 1980). Because they are based on stated preference data, they are able to predict how much market share a new product will capture, and which segments of the population will be most likely to purchase the product (Louviere, 1988). While useful for determining preferences and predicting choice, conjoint and other structural choice models focus strictly on the final stage of the decision process, ignoring the events, judgements, and cognitions that occur prior to the

final choice. The information search process and the actual choice rules or heuristics used by subjects are essentially treated as a black box, the workings of which are not investigated (Hammond et al., 1980).

In these choice experiments, the researcher identifies the attributes of importance and constructs the alternatives. While focus groups are often used to inform the process of scenario construction, each subject is presented with the same set of scenarios or vignettes, despite the likelihood that each subjects will perceive a decision somewhat differently. The scenarios contain descriptive information about all attributes present in a given alternative, and subjects are asked to rate the scenarios, or choose between two. When the decision maker is familiar with the alternatives, or when the alternatives are simple, he or she might not seek information beyond such a description, and little or no search activity is excluded. For more complex decisions, however, a simple description of the alternatives may not be a realistic analogue to the type and amount of information the decision maker would actually have before making a choice (Srinivasan, 1990). Structural models are not considered useful as replica models of cognitive or behavioral processes (Hogarth, 1986), but rather as predictive tools.

The Decision Process

The class of models that address the process by which a decision is made "are concerned with the dynamic aspects of decision making, with the heuristics and algorithms that people use in dealing with a decision problem" (Abelson & Levi, 1985, p. 254). Process models shift the focus from outcomes to processes, and from the factors that determine or predict outcomes to those that influence and shape processes.

One of the major contributions process research has made is in identifying the subprocesses associated with decision making. Research in this area is new enough that the concepts and terminology are not yet standard. The 4 subprocesses reviewed here, 1) decision framing, 2) search, 3) evaluation, and 4) choice, are labeled and defined somewhat

differently across the literature, but each concept captures a set of closely related ideas relevant to extended or unfamiliar decision making tasks.

Decision Framing

Decision framing is defined here as the process by which the decision maker forms a subjective representation of the decision task. The decision maker learns about the decision environment, assesses his or her resources and goals, and mentally sketches a plan for accomplishing the task. This plan reflects the decision maker's experience, knowledge, perceptions, judgements, and decision making style. The decision frame evolves over the course of the decision process, and guides search, evaluation, and choice processes.

The concept of framing is part of many theories of decision making, though the number of factors it includes and its role in the decision process is often more limited than the definition used here. My definition is closest to Newell and Simon's (1972) information processing theory of human problem solving, though that model was developed and tested using laboratory based problem solving tasks, where the decision context and environment are controlled and therefore not instrumental in decision frame formation. Kahneman and Tversky (1979) coined the term "framing" and brought it to the attention of decision researchers by demonstrating its effect on preference stability. They showed that preference reversals could be induced by varying the frame or context in which the problem is presented (e.g., as lives lost rather than lives saved). One explanation given for this phenomenon is that decision makers edit complex problems, creating and solving a simpler problem than they were initially given (Wedell, 1991).

The development of a decision frame is implied in cognitive theories of decision making. Information Integration Theory (Anderson, 1981) postulates that judgement is both context and goal dependent, and employs functional measurement, which measures a *subjectively* defined set of stimuli. Behavioral decision theory (Hogarth, 1980) proposes

that the decision maker engages in a constant process of interaction with the environment. Through this interaction, s/he forms a subjective understanding of the decision environment and interactively formulates and tests plans for coping with it. In normative decision research, which aims to find ways of improving the ability of groups and individuals to make optimal decisions, decision structuring or framing is recommended as a first step in decision making (Einhorn & Hogarth, 1981; von Winterfeldt, 1980).

One of the few consumer behavior models to address decision framing is the Andreason-Ratchford model of decision making (Ratchford & Andreason, 1973). In this model, decisions are described on four dimensions; importance, complexity, the subjectivity of information they require, and the availability of information. To test the model, Ratchford and Andreason (1973) had subjects rate several different decisions on these four dimensions. The ratings on these four dimensions were highly correlated with pair-wise comparative similarity ratings of the decisions, indicating that the model provides a valid means of determining decision frame similarity.

While the Andreason-Ratchford model was developed as a comprehensive model of the entire decision process, it is most useful in capturing the subjective dimension of the decision. This model relates characteristics of the task environment to difficulty of the decision and suggests a means of assessing difficulty, based entirely on the task as it is perceived by the individual. The Andreason-Ratchford model can be used to guide generalization about the subjective aspects, or decision frames, of different tasks. The Engel, Kollat, and Blackwell (1968; Engle, Blackwell, & Miniard, 1986) model of consumer decision making from marketing also proposes a stage of the decision making process where the consumer formulates an understanding of the decision problem.

Some empirical work in consumer behavior supports the existence of a decision frame. In a study of consumer decision making involving non-

comparable alternatives (e.g., choice between a stereo and a television), framing was shown to play a role in the decision process (Johnson, 1984). Johnson notes that in the absence of information display effects, decision makers prefer to search and process information using attribute by attribute comparisons. Non-comparable alternatives, which do not share many attributes, make this type of strategy difficult to use. Johnson found that decision makers tended to represent or frame a non-comparable decision in terms that made it a comparable decision. An example of this type of framing would be to consider both stereo and television part of an entertainment category, and to create a set of attributes applicable to both, such as the amount of use they would get, or the hours of entertainment they could provide (Johnson, 1984).

Johnson's findings indicate that decision makers have developed a decision strategy, ie., redefine the attributes to facilitate processing by attribute. The decision strategy can be considered part of the decision frame, in that it is part of the decision maker's subjective construction of the decision process. The decision strategy guides information acquisition and processing. Because the decision maker has imperfect knowledge of the alternatives in the choice set and their attributes, the strategy is likely to evolve over the course of the process as the decision maker learns more about the task environment and tests the efficacy of the planned strategy (Park & Lutz, 1982).

Decision strategies and their evolution over the course of the process has also been researched. Park and Lutz (1982) examined home buyers' decision plans, and found them to be relatively stable over the process. Phipps (1983) studied residential search as well, and described changes in process characteristics over time. Both efforts faced considerable limitations, however; the Park and Lutz study is based on only 7 subjects, and the Phipps study makes use of an experimental setting, with the entire "home purchase" process completed in an afternoon. Thus far, little has been learned about the dynamics of

decision strategies.

Search

Search activity serves the purposes of making the decision maker aware of alternatives, and providing descriptive and evaluative information about alternatives (Newman, 1977). Unless the choice set is pre-determined (as in a laboratory study), information search is also the mechanism by which a choice set, or set of alternatives, is constructed (Richardson, 1982). Search activity can be internal, where the decision maker accesses his or her memory about a class of products, or external, where the decision maker collects information from various sources. The relevance of internal search in the decision process is widely recognized, but research about its role and influence is inconclusive (Srinivasan, 1990).

Commonly used measures of external search include (1) **content**, the type of information sought, (2) **depth**, measuring how much information is sought, (3) **duration**, or the length of time search continues, and (4) **sequence**, the pattern in which information is acquired. These measures can be weighted and combined to form a scale representing the intensity of search activity (Duncan & Olshavsky, 1982; Keil & Layton, 1981). In addition, consideration is sometimes give to the method of comparison, or whether information is searched on attributes across alternative, or on alternatives across attributes (Bettman, 1979; Jacoby, Chestnut, Weigl, & Fisher, 1976; Payne, Braunstein, & Carroll, 1978).

Research interest in search behavior relates in part to its importance in the purchase decision. From a marketing perspective, the search portion of a decision process is the time during purchase consideration when the consumer is most open to persuasion. For this reason understanding search behavior takes on special importance to marketing researchers (Bettman, Johnson & Payne, 1991). In a review of research on external, pre-purchase search, Srinivasan (1990) outlines three theoretical perspectives on information search: (1) the cost-benefit framework, stemming from Stiglitz's (1961) work on the costs of

information; (2) a "psychological" perspective based on attitude theories for search motivations and styles, (Engel et al., 1968; Howard & Sheth, 1969; Nicosia, 1966) and (3) the consumer information-processing viewpoint, based largely on Bettman's research and writings (Bettman, 1979) about the limitations of human information processing and their implications for the nature of information acquisition and processing.

The first two perspectives present conflicting behavioral premises for search activity. The cost-benefit framework says consumers equalize marginal costs and perceived benefits of information seeking, implying that consumers with low information costs will search more extensively than those with higher costs. Srinivasan (1990) states that this theory is simple, testable, and empirically supported (c.f., Kohn & Shavel, 1974; Ratchford, 1982). The psychological approach emphasizes non-economic motivations for search activity, such as attention, confidence, beliefs, and involvement, and the complex interrelationships between them. These psychological theories are not well supported in the empirical literature, due in part to the difficulty of operationalizing and measuring the attitudinal constructs involved (Srinivasan, 1990). The third theoretical perspective, consumer information processing, is complementary to both the cost-benefit and psychological approaches in that it suggests limits to search activity due to limited information processing capacity, regardless of what forces drive it.

Empirical studies of information search vary widely in their research designs, settings, conceptualizations, and levels of generality. Many search studies are a-theoretical (Srinivasan, 1990). The most consistent findings across studies are that information search exhibits wide variation across individuals in a given setting, and that the distribution of search effort or extent is skewed, with most subjects undertaking some or no search, and a few searching much more extensively (e.g., Katona & Mueller, 1955; Newman & Staelin, 1971). Search, like decision making as a whole, has been shown to depend on

numerous factors. The research on contingencies relevant to information search behavior is reviewed in the section on contingent decision making.

In geography and the related fields of transportation and planning, search is of interest to researchers because it is a form of spatial behavior (Aitken, 1991). Unless indirect sources are searched (e.g., real estate guides), the decision maker must move to access new sources of information, and often leaves behind previously searched alternatives to do so. Especially in transportation, continuing to search (e.g., for a parking space) often requires that one give up the option of choosing the previously searched alternatives (Richardson, 1982). This mechanism also operates to some extent in the search for housing (Jayet, 1991). For this reason, the study of spatial search behavior often subsumes all aspects of spatial decision making research (c.f., Golledge & Timmermans, 1990a, 1990b).

Evaluation

Evaluation refers to the judgement and integration, or ***processing***, of information collected during search. The treatment of this subprocess clearly differentiates the structural and process approaches to decision making. In structural modeling, evaluation is of central importance because, by making assumptions about how information is being processed and evaluated, structural models derive the decision makers' preference rankings which are then used for choice prediction. In a process approach, evaluation is seen as the mechanism by which information is transformed into judgements and choices (Abelson & Levi, 1985). Evaluation is the primary focus of those who seek to understand the cognitive bases for decision making.

In structural modeling, processing methods are called ***choice rules***. Choice rules include the additive or averaging forms of linear integration implicit in IIT (Anderson, 1974; Cohen, Miniard, & Dickson, 1981), and many proposed alternative rules such as elimination by aspects (Tversky, 1972), lexicographic ordering, majority of conforming

dimensions, additive difference, and others (Bettman et al., 1991). Two fundamental classes of choice rules are compensatory and non-compensatory. ***Compensatory*** choice rules are those that allow for tradeoffs between attributes, so that an alternative which is weak in one attribute can be chosen if this weakness is offset by strength in another attribute. ***Non-compensatory*** choice rules do not allow for such tradeoffs. Choice rules can also assume either quantitative or qualitative judgements. ***Heuristic*** is a term used for any choice rule which makes a decision easier, faster, or less complex; it is often used to imply a less than optimal choice rule (Bettman et al., 1991).

In structural decision research, choice rules and heuristics are treated as pre-made elements of an individual's decision making strategy (Karlsson, 1989). In an early criticism of the IIT paradigm, Cohen and his colleagues (1981) pointed out that by assuming the form of the choice rule, choice experiments ignore the influence of perception, memory, and inference.

Early process research retained the convention of assuming that choice rules were pre-made, but did seek to discover which pre-made rule was being used in a given situation (e.g., Payne, 1976). The results of process tracing studies are inconclusive regarding the factors that determine choice rule use, but suggest that compensatory strategies are rarely used, and only when the choice set is small and/or simple (Ford, Schmitt, Schechtman, Hults & Doherty, 1989). Ford and his colleagues note, however, that the artificial simplicity of laboratory process tracing studies biases the subjects' choice rule selection.

Alternative ideas about how evaluation works have also developed in process research. The constructive view of choice (Johnson & Payne, 1985; Payne, Bettman & Johnson, 1990) treats the choice rule as a function of the decision process, which is influenced by the nature of the decision, the environment, and the decision maker. The decision maker uses a choice rule which maximizes accuracy while minimizing effort (Johnson & Payne, 1985). Decisions may require different decision

rules, and when the decision environment is dynamic, different rules may meet the maximum accuracy/minimum effort criteria at different points of times in the decision process (Payne et al., 1990).

Behavioral decision theory (BDT) takes a similar perspective, but one which moves farther from the original construct of a choice rule. BDT sees decision making as a form of goal directed behavior, where the subject's understanding of how to best achieve the goal changes as s/he progresses. Hogarth (1981) uses the analogy of a person trying to shoot an arrow at a target, and adjusting aim as s/he gets closer and observes where the last shot landed. Like Johnson and Payne's constructive view of choice (Johnson & Payne, 1985; Payne et al., 1990), this perspective recognizes that the decision environment changes over time; but BDT also recognizes that the decision maker's subjective understanding of the environment, and of the goal, change through the process. Feedback, learning, and change over time are emphasized (Einhorn & Hogarth, 1981).

Choice

The choice that marks the end of the decision process indicates the decision maker's preferred alternative, in a given situation. Final choices may be one of the alternatives in the choice set (e.g., alternative seasonal home locations searched and evaluated), or a decision to postpone, or decide not to purchase. Any of these choices reflects the decision maker's judgement about the current utility of an alternative in the choice set relative to other consumption or investment possibilities (Hauser & Urban, 1986).

Structural and process research approaches treat choice very differently. As process research has evolved, it has moved away from developing alternative methods for studying choice (e.g., information boards, verbal protocols) to developing alternative theories of how decisions are made. With this shift is emphasis has come much less attention to the choice itself. There are still many unanswered questions about the process of choice. How does the individual move from judgement to choice? How are behavioral intentions translated to

actions? What factors influence the duration of this transition? These questions are consistent with the emphasis of decision process research, but they have not been addressed.

Contingencies in the Decision Process

Early tests of information processing theory found problem solving behavior to be sensitive to task instructions and the type of stimuli given to subjects in experimental settings (Ericsson & Simon, 1984; Newell & Simon, 1972). These and related findings have led researchers to test the decision process for sensitivity to numerous conditions the decision maker is likely to encounter in real world settings (Bettman et al., 1991). The applied focus of decision process research (e.g., the number and importance of marketing's contributions) has given these issues of external validity, termed "contingencies" in decision literature, special importance. One of the most frequently researched contingencies is task complexity (Ford et al., 1989). ***Task complexity*** measures the demands a task makes of the decision maker. Task complexity research recognizes three sources of complexity; (1) the characteristics of the choice set, (2) the structure of information about alternatives, and (3) the characteristics of the decision maker.

The Choice Set

The effect of choice set size on the decision process has been investigated in a number of studies. Task complexity can be operationalized as the number of ***aspects*** of the task, where ***aspects*** are defined as the product of the number of alternatives (m), and the total number of attributes (n) that characterize them (Abelson & Levi, 1985). As the number of aspects (m x n) increases, the complexity of the task increases. Studies have shown that the number of aspects is inversely related to the proportion of aspects which are searched (Payne, 1976, Sundstroem, 1989; Svenson, 1979). It has also been shown that if the number of aspects is held constant, the proportion of aspects searched will decrease with an increase in the number of attributes (and equal decrease in the number of alternatives) in the choice set (Jacoby,

Speller, & Kohn, 1974a, 1974b; Svenson, 1979). Svenson suggests that this result is due to the use of noncompensatory choice rules, in which only one or a few attributes of each alternative need to be searched and processed, regardless of how many attributes are presented.

The type of operators used in a decision strategy has also been shown to vary with the number of aspects. ***Operators*** are components of choice rules, and make up the decision maker's set of standard procedures for evaluating alternatives and acting on the evaluations. The number of aspects, and the number of operators used show a curvilinear relationship, with number of operators increasing up to a point, then decreasing as the number of aspects increases (Abelson & Levi, 1985; Bettman et al., 1991; Payne, 1976; Svenson, 1979).

The relationship between the alternatives in the choice set also influences the extent of search. Greater relative differences between alternatives or the clear dominance of one alternative can decrease the extent of search, while unattractiveness of the choice set as a whole tends to increase search activity (Bockenholt, Albert, Aschenbrenner, & Schmalhofer, 1991).

Another characteristic of the choice set is the number of attributes shared by the alternatives (Ableson & Levi, 1985; Bettman et al., 1991). When the number of shared attributes decreases, the complexity of the task increases. Johnson (1984) has shown that choice sets made up of non-comparable alternatives are processed differently than are comparable choice sets. The processing differs both in terms of the method of comparison (by alternative versus by attribute) and the level of abstraction (or detail/specificity) used to group features into attributes.

The Information Environment

The complexity of a task depends not only on the alternatives in the choice set, but also on the type and availability of information about the alternatives. For example, much of the information needed to make a decision between locations for a seasonal home can only be

obtained by visiting the location, something which cannot be done in any manner other than a sequential one. In other words, the ability of the decision maker to line up all competing opportunities and compare them is lacking. Experiments in decision making have shown that when information is acquired sequentially rather than simultaneously, search strategies and purchase behavior change (Russo, 1977).

Studies of residential search have investigated the role of the real estate agent as an information source. Palm (1976) found that agents tend to recommend search only in areas where they usually have listings. She characterizes real estate agents as "a highly structured and spatially limited information source" (Palm, 1976, p. 28).

Another example of the effect of information type on decision making is found in studies of innovative choice, where the consumer considers purchasing a product which s/he knows little about. A recent study by Ross and Robertson (1990) found that in making decisions regarding innovative products, consumers preferred objective, detailed, non-comparative information about the alternatives in their choice set. To the extent that seasonal home location choice is like an innovative choice, seasonal home buyers might also be expected to seek out this type of information.

The choice of a location is necessarily made on the basis of a mix of stimuli (relating to the current location of the decision maker) and memory (relating to other locations which have been visited). Decisions based on memory are influenced by the characteristics of memory (Bettman et al., 1991; Lynch & Srull, 1982). In an information acquisition experiment, Sundstroem (1989) showed that not permitting decision makers to keep information once they had accessed it affected the decision strategies they adopted. This experiment mimics the process of visiting, and then leaving, a location.

The Decision Maker

Characteristics of the decision maker have also been shown to affect the decision process. Some of the clearest findings come from two

studies by Capon and his associates (Capon & Burke, 1980; Capon & Davis, 1984). In the 1980 study, Capon and Burke found that individuals have information acquisition strategies relating to their socio-economic status (SES) and other enduring characteristics. This was especially true of what they termed the sequence of search (whether attribute or alternative information was sought) and depth of search, measured by how many aspects were searched. Subjects of middle to high SES sought more information and tended to search by attribute rather than alternative.

Capon and Davis (1984) hypothesize that SES was a proxy for underlying variables with more plausible relationships to information search and processing, and tested for the effects of cognitive functioning. They found that cognitive ability was positively related to both acquisition and search strategies, and that the extent of search and complexity of processing were also positively correlated.

An alternative explanation of why SES correlates with search strategies is given in an earlier study done by Claxton, Fry, and Portis (1974). In furniture and appliance buying, Claxton and his colleagues found a relationship between characteristics of the individual and search patterns, with income and education positively associated with thoroughness. Thoroughness includes time spent, number of stores visited, and number of sources used in the decision (Claxton, Fry & Portis, 1974).

Other studies have shown that experience with the product (or product class) being purchased influences search and decision time (Katona & Mueller, 1955). In an extensive review of cognitive psychology literature on expertise with relevance to marketing, Alba and Hutchinson (1987) suggest that expertise influences decision making in several ways. These authors defined ***expertise*** as a combination of product experience and abilities relevant to making a decision that do not directly follow from product use. They cite 5 major themes relating expertise to decision making; expertise (1) reduces the effort needed to make a decision, (2) increases the consumer's ability to differentiate

among products, (3) increases the consumer's ability to analyze information, (4) increases the consumer's ability to make accurate inference when information is lacking, and (5) increases the consumer's ability to remember product related information.

The relationship between expertise and information search suggests that experts are more likely to know about and be able to acquire information relevant to their decision, better able to weed out irrelevant information, and better able to create their own categories for classifying alternatives when existing categories are not adequate, while novices tend to over weight easily understood attributes (Alba & Hutchinson, 1987).

Other Issues

Both the task environment and the decision frame determine how demanding a task is, implying that task complexity could be assessed for both the task environment and decision frames. Most of the studies relating to task complexity (e.g., Payne, 1976) do not make the distinction between the subjective and objective dimensions of the task. There are two reasons for this. First, most studies of decision making focus on well-defined, limited or routine problem solving tasks (Ableson & Levi, 1985), where it is reasonable to assume that there is little difference between the objective and subjective tasks. Second, many decision making studies, especially those that address the specific dimensions of task difficulty, are experimental studies where the decision frame is controlled to the extent possible. However, recognition of the issue of subjective task complexity is growing (Abelson & Levi, 1985) and more sophisticated measures of task complexity have been proposed (Beach & Mitchell, 1978; Wood, 1986).

Decision Process Models and Theories

Studies of the decision making process have generally focused more on questioning and testing the assumptions of structural choice models than proposing alternative theoretical models. There are, however, a growing number of researchers working to develop and test process-

oriented decision models (Haines, 1974). Many of these models were influenced by Newell and Simon's (1972) theoretical and empirical work on problem solving.

The Problem Solving Model

Newell, Shaw and Simon's information processing theory of human problem solving (1958; Newell & Simon, 1972) was one of the earliest process models of decision making. The information processing theory of human problem solving rests on four propositions: (1) there are few invariant characteristics of the information processing system; the process of problem solving is expected to vary across individuals and tasks. (2) Each individual perceives or frames a problem differently, and this frame is termed the problem space. (3) The problem space is one of several possible structures which could have been created, given the characteristics of the task environment. (4) The programs (search and processing strategies) used by the individual to solve the problem are chosen from a range of programs that could be used, given the problem space. In this model, the task environment influences the problem space, which in turn influences problem solving behavior. The structure of the problem space and choice of a program to use within that space are not unique to that task environment, nor are they the only possible space and program that could be successfully used to solve the problem.

While Newell and Simon proposed their theory of information processing as a structure for studying problem solving, decision making researchers have drawn from it extensively, treating decision making as one class of problems (Huber, 1989; Payne et al., 1978). Decision making, like problem solving, involves a process of moving from an initial state to a desired goal state by employing one of many possible strategies. Also like problem solving, decision making may involve working toward a goal which is not clearly conceptualized at the outset of the process (Huber, 1989). The goal state may become more clearly understood during the process, or its conception may change altogether. The flexibility of the problem solving model in defining (and

redefining) the goal of the process, and in recognizing the role of both learning and evaluation in the decision process makes it especially well suited, as a general framework, for understanding complex, extended decisions.

Consumer Behavior Models

Newell and Simon did not continue their work in problem solving, but other researchers have built on and extended their model. Much of this work has come from the field of consumer behavior. Howard (1963), and Howard and Sheth (1969) proposed a typology of buying behavior which builds on the concept of task dependence, proposing that buying behavior differs depending on how unique (or routine) the purchase is. In their model, purchase decisions range from extended problem solving, to limited problem solving, to routinized response behavior as the product becomes more familiar, more frequently purchased, and less important. Extended problem solving, characterized by more extensive search and longer duration, applies to decisions such as seasonal home location choice, where the buyer may not be familiar with any or many of the available alternatives, and thus searches both for purposes of learning about the alternatives as a class and evaluating them relative to one another (Lehman, Moore, & Elrod, 1982). Limited problem solving characterizes external search as a tool for evaluating (but not learning about)alternatives, while routinized response behavior does not involve external search. The typology developed by Howard and Sheth is widely used as a comparative, descriptive tool (Bettman et al., 1991), but implies little about buying behavior beyond the variation in search behavior associated with task characteristics and product experience (Lehman et al., 1982).

Another line of research in consumer behavior which follows from Newell and Simon's model is the information processing work of Jacob Jacoby, James Bettman, and their colleagues (Bettman, 1979; Jacoby, 1975). The information processing work of Bettman, Jacoby and others is aimed at understanding decision making, focusing on the role of

information in that process; the information environment, the subject's information processing practices and abilities, the information load of a given task, and so on.

The major significance of this group's work is in their advancement and testing of process tracing research methods (Beihal & Chakravarti, 1982; Bettman & Park, 1980; Jacoby et al., 1974a, 1974b; Jacoby et al., 1976). The information board method for tracing information acquisition is one such development. This method uses an array of information about the attributes of the alternatives available to the subject. The board is set up so that information may be accessed by the subject during decision making, and the researcher is able to record the exact nature of that information acquisition. The information board method allows researchers to directly observe the characteristics of information search, including the type of information used, the sequence in which it is accessed, the amount of time spent considering each piece of information, and the total amount of information accessed before decision making (Berning & Jacoby, 1974; Bettman, 1979; Brucks, 1988). Combining this technique with other process tracing methods such as concurrent verbal protocol techniques has also been found effective (Payne, 1976).

Behavioral Decision Theory

Behavioral decision theory (BDT), developed by Edwards (1961), Einhorn and Hogarth (1981), and other scientists associated with University of Chicago's Center for Decision Research, grew out of the problem solving - information processing (PSIP) models. BDT is concerned with the strategies a decision maker develops to cope with a decision, such as unique information search patterns, evaluation strategies, and choice rules. The mechanism guiding decision behavior is the individual's attempt to maximize subjective expected utility; that is, to maximize utility given his or her subjective expectations about the utility associated with each alternative (Edwards, 1961; Edwards & Tversky, 1967).

In BDT, decision making is assumed to be context dependent, goal dependent and adaptive (Hogarth, 1980). This is essentially a restatement of PSIP assumptions, but the BDT researchers have drawn concepts from cognitive psychology to explain the mechanisms by which adaptation is achieved. The concept of adaptation clearly sets PSIP and BDT models apart from others. Most process and structural models assume that there are underlying mechanisms (e.g., choice rules) common to and operating in every decision. The variations in decision processes and outcomes is attributed to certain factors, called "contingencies", that alter their operation (Bettman et al., 1991). For example, the method of processing information has been shown to vary with the amount of information the decision maker is given (Malhorta, 1982). Earlier process and structural models explain this by saying that information processing is contingent on or affected by information load. BDT takes a different approach, stating that the information processing strategy is a *function of* information load (Einhorn & Hogarth, 1981). Process research generally supports the BDT model, indicating that the decision process is "contingent" on almost all factors which have been investigated (Ford et al., 1989), suggesting the absence of a general, underlying structure.

Unlike normative decision theories which suggests that decision making behavior is often irrational (e.g., Nisbett & Ross, 1980), BDT states that judgement of rationality can only be made if the context, perception, and goals of the decision maker are fully understood (Einhorn & Hogarth, 1981). The "heuristics and biases" identified by researchers such as Kahneman and Tversky (1979) are seen as adaptive mechanisms, rather than errors. Such mechanisms are employed by the decision maker to cope with heavy task demands or unstable decision environments, especially in cases where decision outcomes are relatively unimportant (Einhorn & Hogarth, 1981; Hogarth 1980; Payne et al., 1990).

Decision theory has moved from its origins in microeconomic consumer theory to a more psychologically based, empirically supported

perspective which adds recognition of the importance of both environmental constraints and human cognitive limitations. The basis for decision making behavior in BDT encompasses both the economic concept of subjective expected utility maximization, and the psychological concepts of stimulus-response behavior and cognitive processing.

The Dynamic Decision Process

Most structural and process models treat decision making as a static or a-temporal event. Dynamic effects occurring both across decision events (inter-decision dynamics) and within a single decision process (intra-decision dynamics) have been incorporated in some decision models. Inter-decision models focus on the changes in perception, judgement, evaluation and choice occurring between decisions, usually in reference to repeat purchases within a single class of goods. These models often consider the role of learning and feedback (e.g., Lehman et al., 1982). Variety-seeking models of consumer purchase behavior are another example of inter-decision dynamics (McAlister & Pessemier, 1982).

Much of the previous research dealing explicitly with intra-decision dynamics comes from structural modeling. Research has shown that choice models are context dependent, where "context" refers to the characteristics of the choice set (Wedell, 1991). In cases where the alternatives that make up the choice set are subject to change over time in such a way that the weighting of attributes in the utility function is affected, models can be formulated which account for the changes by means of varying parameters (Ben-Akiva & Lerman, 1987). In these models, a change in a context-related independent variable is linked to a set of parameters, capturing the effects of context change on utility function parameters. Examples of this type of model include Meyer and Eagle's (1982) nested or hierarchical model; Kahn and Meyer's (1991) uncertainty model; and Roberts and Urban's (1988) Baysian updating model.

Intra-decision dynamics are an implicit element of most process models, as their primary focus is to understand how the decision process unfolds, implying some sequence of events. Dynamics are given a more explicit role in BDT (Hogarth, 1981). The concept of adaptive behavior assumes the decision maker will react to perceptual and environmental changes, and their decision making behavior will reflect that reaction. For example, the belief adjustment model of Einhorn and Hogarth (1985; Hogarth & Einhorn, 1992), based on the concepts of belief anchoring and adjustment, predicts the strength and valence of changes in judgement during a decision process resulting from learning and feedback.

Payne, Bettman, and Johnson's (1990) constructive view of choice, while not a model of the overall decision process, also suggests that search and evaluation will vary over the course of the choice process as changes in the decision environment affect the effort required to make a decision of a given accuracy (Payne et al., 1990).

Conclusion

Much of the literature reviewed here contributes not to understanding the seasonal home decision process itself, but rather to understanding how decisions have been studied previously, and how and why the approach used to study this decision process should be different. Although psychological process models and economic structural models differ in conceptualization, level and unit of analysis, methods, and goals, they share a history of almost exclusive application to short term decision making. Working from the conceptual basis of problem solving and behavioral decision theory, there is potential for extending the traditional models and methods to explore long term decision making, and the role of temporal and dynamic factors in the decision process.

The theoretical models discussed in this chapter are summarized and integrated with the verbal protocol findings (Chapter 3) to propose a model of the seasonal home location decision in Chapter 4.

CHAPTER THREE

RETROSPECTIVE VERBAL PROTOCOLS: METHODS AND RESULTS

Methods

The study of decision making includes few examples of purchase decisions like the seasonal home purchase. Whether and how such long, complex decisions differ from simple decisions is an open question. The literature on choice modeling and on decision making ask and answer different sets of questions, and in both cases, those answers come from laboratory studies of simple decisions or choices.

Extending this line of research to a new setting poses methodological problems. The methods commonly used in decision research do not lend themselves well to studying decisions which occur over an extended time period. Laboratory-dependent methods cannot trace changes over an extended time or reactions to change in the decision environment. Furthermore, they limit the duration of the decision process to a set time period and restrict the decision maker's ability to set their own pace for the decision process and its resolution.

Adapting existing methods or developing new ones to study long term decision making, however, requires at least a general understanding of the complex decision process. The variables that affect the process and its outcome, and the temporal dimensions of the decision process have to be identified before they can be measured. For this reason, the study begins with set of semi-structured interviews with seasonal home buyers. These interviews provide an initial description of the seasonal home decision process.

Retrospective Verbal Protocols

The verbal protocol method is a qualitative data collection technique often used in process tracing studies of decision making. A verbal protocol is a record of a decision maker's thoughts, judgements, and decisions during a decision making process (Ericsson & Simon, 1984).

Protocols can be recorded concurrently with the decision making process by asking the respondent to verbalize his or her thoughts while making a decision, or retrospectively, after the decision process has been completed (Ericsson & Simon, 1984). Retrospective verbal protocol interviewing is similar to other unstructured interview techniques, except that protocols focus on the events associated with one decision making process. Because the seasonal home location decision process occurs over an extended period of time, recording protocols concurrently, as is usually done, was not practical.

The key advantage to using verbal protocol methods retrospectively is that decision making can be studied in the field. In field studies, temporal and spatial dimensions of search, evaluation, and decision making are not altered. In recreation and tourism, where information may be largely informal or spatially dispersed, where time pressures are often absent, and where many purchases are strategic in nature, allowing the decision process to unfold without intervention is especially important.

Protocol Objectives

The objectives of the verbal protocol interviews are to:

1. Identify the variables important in the seasonal home decision process,
2. Describe the temporal dimensions of the decision process, including its rate of progress and duration, and
3. Assess the potential usefulness of questions and concepts employed in decision making and choice research in the context of seasonal home decision making.

The success of the retrospective verbal protocol method depends in large part on how well the subjects remember their decision process. The most important factor in memorability is time. Minimizing the time between the event and the interview is essential. Salience also plays a role in determining memorability, and is measured by typicality,

emotional impact, financial impact, and event duration (Auriat, 1993; Rubin, 1986). Decisions characterized by high emotional impact, low typicality, major financial impact, and long duration (ie., the decision is made over a long period) will be remembered best.

The nature of decision making in field settings may further compensate for the decay of memory over time. While retrospective reports of decision making in the laboratory can only draw on memory records of cognitive activity, the field study draws from memories of both cognition and behavior. Decision making behaviors, such as visiting alternative sites, talking with facility staff or with sales agents, or discussing the decision with a friend, help to reinforce the record of cognitive events, providing additional cues for their retrieval (Bradburn, Rips & Shevell, 1987). In addition, in a field study it is the decision maker rather than the researcher who is responsible for decision process initiation, choice set formation, and attribute definition, making him or her more involved in the decision process.

For generating an initial description of the decision process which further research can build on, the retrospective verbal protocol method is the best method available. It does, however, have some limitations. The time and resources needed for processing each interview requires using a small sample. Because respondents are asked different questions, the verbal protocol data supports individual level analysis, but not comparisons across subjects or exploration of the relationships between variables. The panel survey builds on the results of the verbal protocol data and allows for further data analysis.

Study Population

The population for this study is all people who have made or are making a seasonal home location decision, including anyone who owns a seasonal home, and who is or was involved with the purchase of the seasonal home. Also included are all members of the group or family that

may have bought a seasonal home together, providing they were involved with the decision process. The study population does not include seasonal home owners who did not participate in the decision process, e.g., those whose seasonal homes were given to them by family members, or acquired by marriage. Because of the potential for recall bias, the population will be limited to those whose purchase was completed within a year of the study date, or who have not yet purchased a seasonal home.

Sampling

The sampling frame was generated using a snowball sampling technique, where each person interviewed is asked to suggest other people who might be interviewed. An effort was made to interview the actual decision making unit, whether an individual, couple, family, or other group. When this was not possible, the interviewee was encouraged to discuss the contributions of all group members to the decision making process.

Purposive sampling was used to include a variety of decision makers. An effort was made to include decision makers who (1) are at different stages in the decision process; (2) are looking for seasonal homes in different geographic areas, and (3) represent a variety of demographic segments. Including decision makers in different stages and situations makes it possible to distinguish the aspects of decision making which vary across decision makers and stages of the decision process from those that do not.

Interviewing

Interviews were conducted at a time and place of the subject's choosing. The length of the interviews varied depending on the subject, ranging from 15 minutes to more than an hour. Interviews began with a brief explanation of the research project, including its purpose and sponsors. In order to avoid biasing the subjects or influencing the way in which they present their account of the decision process, the description of the study's purpose was brief and general. Each subject

was asked for, and gave, permission to tape the session.

Each subject was asked to talk about the process they had gone through or were going through to find a seasonal home. The importance of including all parts of the process, starting with the time they first considered buying a seasonal home to the present time, and of indicating the sequence in which things happened, was emphasized. Examples of the type and range of information sought from them were given when clarification was requested. Following this introduction, the interviewer interrupted as little as possible, and only for the purpose of encouraging continuation of the narrative, or redirecting the discussion to the topic of the decision process. Depending on how forthcoming the subject was, follow-up questions were sometimes asked. Each interview ended when the subject indicated that the whole story had been told.

Analysis

Analysis of the protocol data began with transcription of the interview tapes. The written transcripts were then analyzed using the open coding method of qualitative data analysis (Strauss & Corbin, 1990). The open coding technique allows the analyst to define variables, concepts, and relationships as outputs of, rather than inputs to, the analysis process. The transcripts were read to identify important variables and relationships, and to determine what categories would be most useful for organizing results. Once the structure for analysis was developed, the transcripts were re-read and the results organized.

Results

Analysis of the protocols revealed two dimensions in the interview data; 1) a set of factors which influenced the course and nature of each decision process, and 2) a temporal pattern or sequence of decision making events common to the decision processes. These two dimensions are discussed, using excerpts from the protocols to illustrate. In Chapter

4, a general model summarizing the relationships between factors that shape the decision process and a sequential model of the stages of decision making are proposed.

Sample Characteristics

Nine verbal protocols were collected during 1992-1993. The sample includes 5 people who had recently purchased seasonal homes, 1 person who had recently considered a purchase but decided against it, 1 who was still considering a purchase but decided to delay further action, and 2 people who had just begun to actively consider a purchase.

All but two subjects were considering or had purchased homes in northwest lower Michigan, although some had also considered sites in central Michigan and in northeast lower Michigan. The remaining subjects were interested in southwest Michigan, on the Lake Michigan coast. Other regions of the country, including California, Florida, and North Carolina, had also been considered by some subjects.

Decision makers differed in preferences for neighborhood settings (e.g., seasonal home associations, resort developments, secluded rural areas). The group also had diverse preferences for natural settings, recreation resources, and size, type, and proximity of local community. Of those who had purchased a seasonal home, most reported having spent about 10 years considering a purchase, and 3-5 years actively looking (working with a realtor, driving around potential areas).

The Decision Process

While the decision process was somewhat different for each decision maker, three general stages or sets of events emerged which were common to all but one decision maker interviewed. The earliest activities associated with the seasonal home decision process involved forming a decision frame. The following excerpt is from an interview with a man who has just begun to look for a seasonal home. He is tentative about many aspects of the decision process, including his budget and search strategy, recognizing the possibility of changes in

the decision environment that might affect his decision:

> . . . we began staying at a place near Pentwater and on the beach on Lake Michigan. My wife had never been, never stayed on a cottage on the lake before and she just fell in love with being there. . . I think it is the most beautiful beach in Michigan. And so we kind of decided that we were going to start saving and looking for ways to find a place on Lake Michigan. We talked to two of our friends and there is a possibility . . . that this would be either a two family or a three family place. We thought about the tax benefits too. . . . I would think that the second home tax deduction would perhaps go away in the coming four years. . . . But that wouldn't be a deterrent to us at all. So, . . . we started putting oh a few hundred dollars a month into a different mutual fund just to save, to get together a down payment. We decided to start calling, have not placed any calls yet. Start calling real estate firms in the cities that are proximate to the lake, all the way from Muskegon up to the northern part of the Lower Peninsula. We would rather be south, because of the proximity to Lansing and reduction of travel time, but we would go north if pricing made a difference. I don't know if it does or not.

At this point, he has a general idea about the location he prefers, the financial requirements and how he will meet them, and a strategy for beginning to actively search. The statement he ends with was typical of the first stage of decision making; he has considered sacrificing proximity to home for a lower price, but does not know whether it is necessary to make that trade-off. While uncertainty was common in the first stage, decision makers differed in what they were uncertain about; for some, motives were difficult to sort out, while for others, gauging marginal costs of attributes was a greater concern.

While previous process tracing research has treated all search activity as a tool for evaluation and choice decisions, these protocols indicate that search is also important in helping decision makers frame the decision. In the next interview, the decision maker discusses the transition between early search activities, aimed at becoming familiar with the decision environment and the universal choice set, and later search efforts which involved learning about specific alternatives:

> Five years ago we didn't invest our time and take up somebody else's time and energy and thought process to help us out. We looked, you know, drive by stuff. And not just stuff, but drive by areas. And you know, I mean we've scoured, we semi-scoured northern Michigan and we've taken weekends that we just sort of gone up and maybe we'll stay

> with my family in West Branch and then we will just head, you know, north and a little bit east, or a little bit west and take Lake Huron or take ah, Lake Michigan or Grand Traverse, or Little Traverse Bay and just sort of look around and talk to friends. . . so we thought well let's, let's start to ah, talk to people, [to real estate agents], you know.

At this point, the decision maker feels he has resolved enough of the uncertainty about the seasonal home market, and about his preferences, to feel comfortable contacting a real estate agent. One unusual feature about this person's search activities is that he did not "nest", or narrow the geographical area of the search, which most decision makers did before contacting a real estate agent. Nesting in seasonal home search may be related to the geographical limits on any one real estate agent's territory. Choosing an agent almost requires deciding to limit search to that agent's territory. The person quoted above dealt with the agents' limitations by working with agents in a number of different regions.

Nesting also serves to limit the decision maker's travel costs. Another couple interviewed, who did not work with real estate agents, did not "nest" their search until they were well into active search. They describe their search strategy:

> We would just go to the local little store and we'd say, do you know of any places for sale. Well some of them aren't in the real estate magazines, don't go to realtors. They just put them up for sale by word of mouth. So that, you know, we found quite a few different places that way.

They reported visiting areas ". . . anywhere from two hours away from us to four to five hours away from us." They describe their strategy for limiting search costs:

> . . . we usually went the cheap way. We even found ourselves sleeping in the car sometimes. Tenting, or we never stayed in hotels. We rented a few places just so that we could check out the areas and would have friends come up in the areas that we were renting in and they would go in one direction for us . . ..

During the first stage of the process, decision makers also reported making some initial decisions to eliminate parts of the choice and criteria sets, which made the decision task more manageable.

Working with a smaller choice (or criteria) set simplifies the search process, and makes it more efficient by focusing in on just the alternatives that are most likely to be satisfactory:

> But what we did, we identified, rather than saying geez, this is really pretty, we sort of thought, well this is what we want and what we want we did it two ways. We decided what we didn't want. I don't want lake front, I mean I would not be opposed to lake front, but I'm not an aquatic kind of a guy, . . . and so we narrowed. We eliminated. Some people I know they got to be on the lake, either the big lake or the big bay . . . or else an inland lake. And that isn't a requirement for us. What sort of has been the requirement though is the golf course.

The method he used to eliminate alternatives from the choice set has been termed an Elimination by Aspects (EBA) choice rule, first proposed by Tversky (1972). When the EBA rule is used, one attribute, in this case waterfront, divides the choice set into acceptable and non-acceptable subsets. The non-acceptable subset is eliminated. If the decision maker continues to use EBA, s/he will again partition the choice set and eliminate non-acceptable portions of it, until the choice set contains one acceptable alternative. EBA is a non-compensatory choice rule, in that no value on other attributes or aspects (e.g., view) can compensate for a non-acceptable value on the attribute being considered, which is waterfront location in this case.

Compensatory choice rules were also used, often by the same decision maker. This same decision maker discusses how a lower price can compensate for not having golf course frontage:

> I mean the one process is do you want a lot on the golf course. . . . And no, frankly, I mean if we had a lot on the golf course it would be great, but that is not a prerequisite. I had several people tell me that the smart people get one lot away from the golf course, one lot removed and then you know, the price of your lot is $30,000 less than what it had been also.

During the second stage of decision making where initial decisions and plans guided search activities, there were often changes in what decision makers were looking for and how they thought they could find it. Some arose as decision makers learned more about the relative costs of the features they wanted. In the next excerpt, a couple describes

their experience trying to find a nice cottage in their price range in the Grand Traverse Bay area of Michigan:

> ". . . every cottage we went to, you know, it was the price range we were looking at, we were not going to get a Tajmahal and so . . . it was always something wrong, you know. We walked out on one that the dock was tilted like this. We were holding the kids up going, yeah, this would be fun."
> "You make it sound like we're looking for a $20,000 cottage."
> "No, you know what the prices are up there, I mean, you know, these were $100,000 places."

This couple eventually discovered that prices vary considerably with distance from Traverse City, and by re-orienting their search were able to find a seasonal home that met their expectations:

> ". . . and I said, this is what I envision being able to buy and here it was. But we were surprised how . . . the price of property when you get above like Suttons Bay, drops."

There were other decision makers whose initial ideas and plans did not change over the course of the process.

The third stage of the decision process, where the decision maker chose a seasonal home, often ended abruptly. In describing their purchases, each of these people talks about their decision to act on their judgements as a spontaneous event:

> It was something that we had always been looking for. It is wooded, it is on the lake, it was a place that we thought we could feel comfortable in as a retirement home. And so *we bought it right there on the spot.*
>
> And ah, one July 4th weekend I just told her, I said this has been going on too long, we got to do something, we got to make a decision now or forget it. I said I don't want to be thinking about this place anymore. And *we looked at each other and said, what the heck, so we decided to.* That July 4th weekend we got the car and drove north . . ..
>
> Then [the agent] called me and said there was a really nice place right on the water, it fit everything that I wanted . . . but it was a good little piece of money, more than I was thinking of. So well *as soon as I saw it, that was it.*

In analyzing these and other protocols, it appeared that the decision to act was made when an alternative was judged either acceptable or better than all other alternatives, and was available when conditions were right for the buyer to make a purchase. Active search or consideration of new alternatives had often ended before the choice

was made. The end of active search was the only factor identified which might be a useful indicator that the decision process was close to an end. The timing of purchases may be complicated by the decision maker's awareness that the availability of a given alternative was limited. While none of those interviewed specifically discussed the possibility of losing their preferred option to another buyer, it is possible that this awareness motivated buyers to act quickly at the end of the process.

For those who did not purchase, the final stage involved either deciding that an attractive alternative did not exist, or that conditions were not right for buying a seasonal home. One decision maker spent several years framing the decision and going through directed search activities before deciding to delay his purchase. Here he describes suspending search because conditions are not right for a purchase:

> The thought process that put us on hold financially is that ah, we are finding that everything is a lot, costs a lot more than what it used to which I know, and then five years from now it is going to cost a lot more than what it does now, too. I realize the cycle is going up, not down. And interest rates are attractive now, but you know how long that will be. And the other thing, what we did is ah, instead of, I had some equity that we were willing to make a decision on and rather than making the decision to put it into property, we've added on to our house. . . . So that sort of took up that burning desire to go deeper into debt.

In the next excerpt, the decision maker is not able to frame the decision and define a desirable enough goal. He describes search activity and perception characteristic of early decision making activities, which has been going on for several years:

> . . . we've looked, I mean that is kind of all part of the activity almost every summer, we do look to see what's on the market in real estate, [but] . . . I think I've learned from people that I've talked to that there is a love at first sight type of response that people have when they go to an area and they really have a great time, the weather is nice and everything works out . . .. [But] we have to sort of condition ourselves not to jump into these things on an emotional basis and when we get home and start putting the numbers on paper and checking on zoning and other kinds of things, we said well we don't know what is going to happen here in five years. And the house may fall into the lake.

> And, you know, there are always these things as you dig into it more deeply; the risk side of it begins to come out and the emotional love affair sort of balances out, and you say well maybe it is better just to hang on to the money and use it to rent.

Some sources of delay, or time spent in the decision process when the decision maker still intends to find a seasonal home but is not actively searching, can also be identified from the protocols. Here the decision maker is willing and able to search new alternatives, but must wait for them to become available:

> So then I contacted a real estate agent and gave them the parameters of what I had in mind and there just wasn't hardly anything available. . . . [But] people are always moving along. They are either upgrading or dying or something, ah, so you just have somebody watching. So anyway, why ah, I got a call that there was a place that it looked as though the contract might not go through. And so I went up and saw it and [it was] real nice, but it turned out, the contract did go through. Then [I looked at] a couple of others.

Approximately a year after conducting these interviews, I checked back with two subjects interviewed early in their decision process who had intended to continue their search for a seasonal home. Neither had done so. One couple decided they needed a bigger permanent home, and so stopped looking for seasonal homes. They plan to resume looking sometime next year. The other suffered major health problems and is unsure about when, if ever, he will resume searching.

Summary

The protocols collected from seasonal home buyers suggest several tentative conclusions regarding complex purchase decisions:

1. There is great variation in individual decision processes.
2. Most decision makers will be inexperienced in buying the product.
3. Decisions often involve multiple decision makers.
4. The choice set is open-ended and evolves over the course of the decision process.

The structure of the decision process, identified in part through

these interviews, is formalized as a general conceptual model in the next chapter (Chapter 4). The variables identified through the verbal protocol interviews are used to operationalize this model in the context of seasonal home location decision making.

Temporal dimensions and relationships were also identified through these interviews:

1. Decisions are made over an extended time period.
2. The decision process unfolds in a series of stages. In **Stage One**, decision makers learn about the decision environment, make initial decisions about how much time and money to spend, and edit choice and criteria sets. In **Stage Two**, decision makers visit potential seasonal homes, work with real estate agents, and judge the desirability of the alternatives in the choice set; and in **Stage Three**, decision makers resolve the decision process, either by choosing a preferred alternative, or by deciding not to continue looking for an acceptable alternative.
3. The decision process is dynamic, with extensive learning, adaptation, time lags, and feedback effects.
4. The sequential availability of the seasonal homes choice set affects the timing of decision process resolution.

The temporal model of the seasonal home decision, presented in Chapter Four, incorporates each of these concepts.

CHAPTER FOUR

A PROPOSED MODEL OF COMPLEX CHOICE

Introduction

The purpose of this chapter is to propose a general model of the decision process associated with complex choice and apply it to seasonal home location choice. In the first section of the chapter, the decision process, decision theory, and the general model of complex choice are discussed. Much of the discussion is based on literature reviewed in Chapter 2. In the second section, the general model is operationalized in the context of seasonal home location decision making. This section also introduces a model of the sequence of events associated with seasonal home choice. The second section is partially based on the verbal protocols, which are discussed in Chapter 3. Chapter 5 and 6 present methods and results of a longitudinal survey developed from the general and temporal models presented here.

The General Model of Complex Choice

The Decision Process

While much decision research focuses on predicting choice based on preferences for attributes (Louviere 1988), there is growing interest in broadening the scope of research to consider more of the events that precede choice. People make choices only after making a series of judgements and decisions, such as the importance of some feature of a product, how much money to spend, whether to visit more stores to look for more alternatives, and so on. This series of decisions is the focus of decision process theory and research (Abelson & Levi, 1985).

Decision process research is relatively new, but has begun to generate a description of decision making (Abelson & Levi, 1985). Decision processes vary in complexity. When a choice is made from among relatively unimportant, easily understood or familiar alternatives, one or a few decisions will be made (Lehman et al., 1982) (e.g., whether to

buy a magazine, which to buy, and where to buy it), and the decision maker's preferences are a good predictor of her/his choice. Choice from among less familiar, more expensive, risky, or more important alternatives, however, may involve a long series of interrelated decisions, such as whether and when to buy a car, which car to buy, how to finance the purchase, through which bank, and so on. As the number of decisions preceding a choice increases, the time required to make the choice will also tend to increase. The simplest choices can be made in minutes, but very complex choices may require months or years of deliberation. During the time it takes to make a complex choice, the decision environment, the alternatives in the choice set, or the decision maker's situation can change, prompting the decision maker to revisit earlier decisions and prolonging the decision process. Although preferences for attributes will still influence choice, the difficulty of coordinating the many decisions and resources involved in a complex choice may complicate their relationship. Because most decision research involves short term, simple decision processes, little is known about whether or how the nature of the decision process affects complex choice.

Decision Theory

Decision process theories support the concept of a link between the decision process and its outcome. Behavioral decision theory (BDT) hypothesizes that decision making involves learning and adaptation to the decision environment (Einhorn & Hogarth, 1981). BDT states that learning can alter the decision maker's perception and judgement, and is most likely to occur when the decision maker is initially unfamiliar with the choice alternatives or the decision environment. Adaptation will be most important when the decision environment is unfamiliar, or when the environment changes over time. Both of these conditions, an unfamiliar task and a changing decision environment, are most likely to be associated with complex choice, implying that learning and adaptation will be most important when choice is most complex.

In contrast to more traditional choice models, BDT does not regard preferences and choice rules as fixed or predetermined. Both are considered outcomes of the learning and adaptation that occurs during the decision process, rather than fixed features of a decision maker or a type of decision task.

Other decision theories also support the concept of learning and adaptation during decision making. According to Newell and Simon (1972), each person needs to understand and interpret or frame the choice in their own terms before they begin trying to resolve it. In their model of problem solving, framing is proposed as a first step in solving a problem or making a choice. The frame coordinates and directs other decision making activities. Its idiosyncratic nature, together with its influence on decision making behavior, offers an explanation for why decision making varies across individuals (Haines, 1974). Information processing (IP) research focuses on the ways people deal with large amounts of information (Bettman, 1979). IP research has demonstrated that people create and use a variety of methods for searching and processing information to avoid being burdened with too much information, an example of adaptive decision making behavior.

Behavioral decision theory, the problem solving model, and the information processing perspective, like much of decision process research, apply psychological concepts to decision making. For example, psychology recognizes that individual differences exist in personality, cognition, and perception; both BDT and problem solving state that such differences give rise to individual variations in decision making. Behaviorism holds that behavior is shaped by the environment; all three theories use this concept to explain and predict variations in decision making related to the context of the decision. Unlike economic theories which state that preferences are stable, the psychological approach assumes that perception, understanding, and preferences are changeable. Each of these three theories uses psychological concepts to explain some aspect of decision making behavior that predictive choice models treat

as anomalies or "noise", moving further away from simple predictive models of simple choices.

The Model of Complex Choice

The general model of complex choice is shown in Figure 1. Four sets of factors influence choice; the decision maker's characteristics, the nature of the decision environment, the decision frame that is developed during the decision process, and search and evaluation activities. No aspect of the decision process is pre-specified; the decision frame, choice set, search strategy, information processing, and choice rules are developed during the decision process and together influence choice. The arrows show the links between antecedents and decision frame, and between decision frame and search and evaluation.

Characteristics of the decision maker and the decision environment are antecedents to the decision process. As the decision maker learns about the decision environment, s/he reconciles personal preferences, motives, knowledge, and capabilities with the potential opportunities and constraints in the decision environment. This process of learning and reconciliation results in the formation of a decision frame. The decision frame mediates the relationship between the decision maker and his or her decision behavior, as well as the relationship between the decision environment and behavior. In other words, neither characteristics of the decision maker nor of the decision environment alone will predict decision behavior; both influence the decision frame, which in turn shapes search, evaluation, and resolution.

The search for information and the evaluation of alternatives are directed and coordinated by the decision frame. Because the decision frame is determined by a decision environment and a decision maker, it will change when they do. More specifically, the decision frame is based on a perception of the decision environment; if the perception changes, the decision frame can be expected to change as well. Search and evaluation activities may also affect the decision maker's perceptions, and thus change the decision frame. In this sense, a feedback

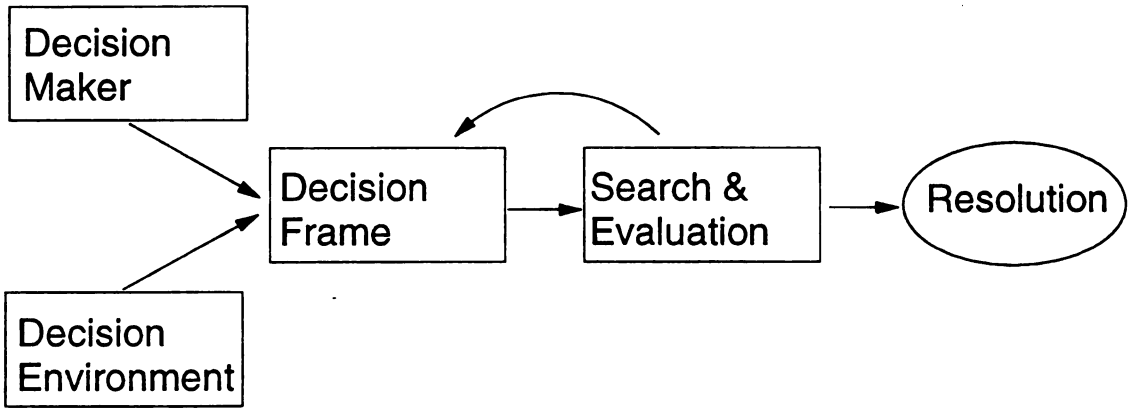

Figure 1. A General Model of Complex Choice

relationship exists between the decision frame and search and evaluation.

The decision process ends when the decision maker decides to stop searching and evaluating alternatives. This resolution of the decision process may not involve choice; it may instead involve a decision to delay any further consideration of the choice, or a decision not to choose any alternative.

The model of complex choice describes the behavior of individual decision makers. The role of decision maker characteristics and the decision frame imply that decision making is an idiosyncratic process, though there may be similarities among decision makers whose perceptions and situations or decision frames are similar. The model is supported by the many empirical studies (see Ford et al., 1989) that have shown decision making to be contingent on characteristics of the decision

maker and decision environment. The general model of complex choice does not specify what sequence of events will accompany a given decision or how long it will take, but suggests that attention to the sequence of events is important, that changes in the decision frame can be expected, and that the passage of time will influence the decision process.

The Seasonal Home Location Decision Process

Verbal protocol interviews conducted with a small group of seasonal home buyers were used to operationalize the model of complex choice. The protocols aided in identifying variables that measure the concepts proposed in the model, and gave an initial indication of the model's validity.

Figure 2 shows the model of seasonal home location decision making. The antecedents of the decision process are characteristics of the decision maker and the decision environment.

The Decision Maker

Characteristics of the decision maker are relevant to seasonal home decision making if they capture the decision makers' perceptions, knowledge, abilities, or preferences relative to seasonal homes. The protocols suggest several variables that meet this criterion. All of the home buyers interviewed talked about their preferences for seasonal homes in terms of their favorite recreational activities. For some people, the home had to be near a golf course; for others, near the lake or the ski areas. The decision to buy a seasonal home was often justified by reference to recreation, e.g., "we wanted a place where the kids could play in the water". People were also concerned about choosing a seasonal home that would be suitable for the whole family, at the current time and in the coming 5-10 years. For example, the home buyers with teenaged children wanted to be certain they were in an area where their kids would have things to do, or opportunities to find a summer job. Retirement plans sometimes influenced the decision, especially for people planning to retire in the next 5-10 years. All of the decision makers raised the issue of how to afford a seasonal home. In some

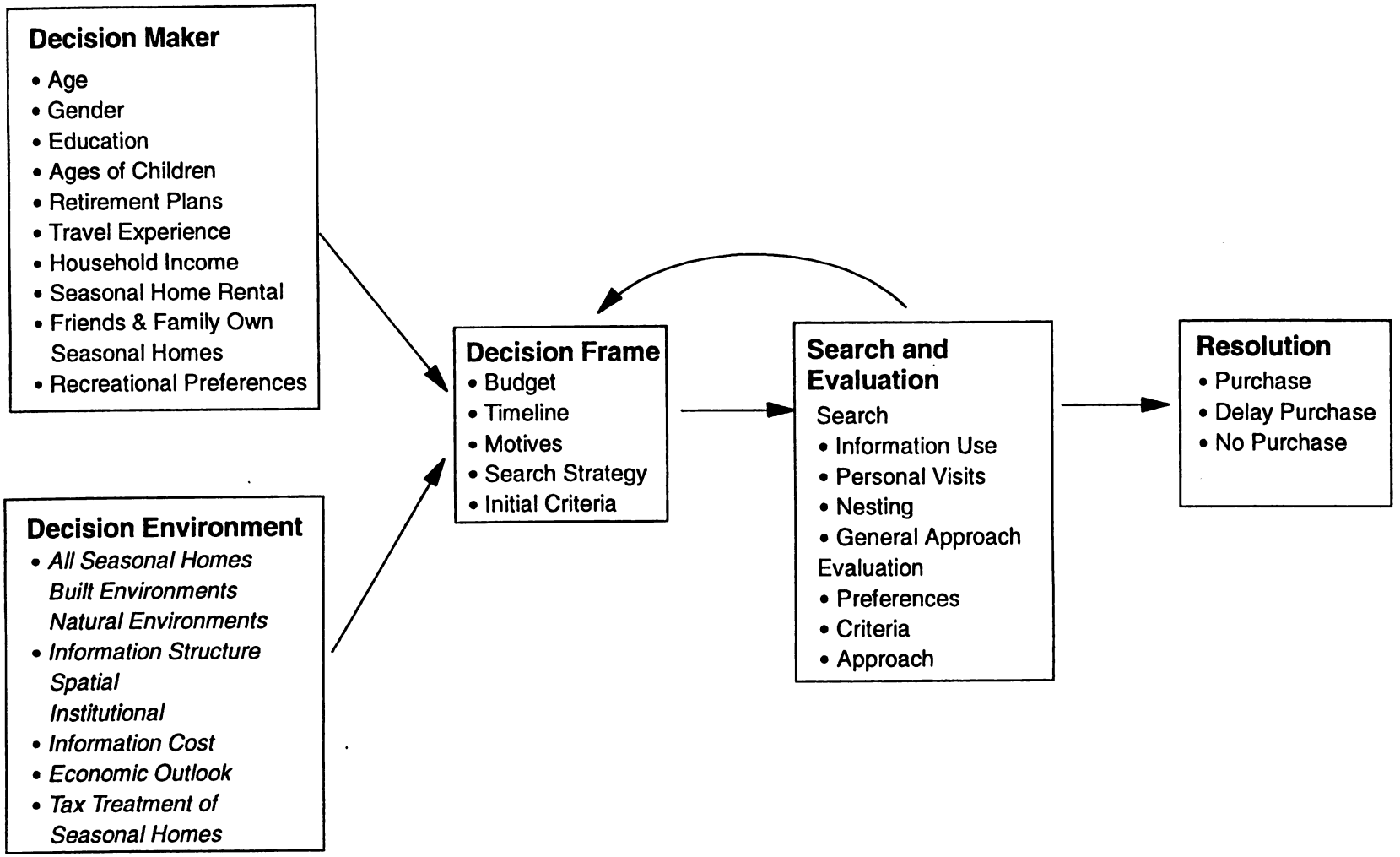

Figure 2. The Seasonal Home Location Decision Process Model

interviews, people started describing their seasonal home decision process with stories about renting seasonal homes, or travelling in seasonal home areas, indicating that these experiences influenced their decision.

The Decision Environment

The decision environment is the setting in which the decision maker must operate, and is defined by the physical and institutional structure that delimits the decision maker's range of action. Each decision has a different decision environment. In a laboratory experiment, the researcher creates the decision environment; in a field study, the researcher observes the environment. The central claim of the behavioral approach to decision making is that decision makers learn and adapt, and it is the decision environment that describes the bounds of what the decision maker can learn about and adapt to. In the terms of behaviorism, the decision environment is a set of stimuli, and the decision maker's behavior is the response.

For the seasonal home purchase, the institutional structure limits the decision maker's options. For example, the laws that govern taxation, title transfer, and lending, and the agents that must be involved in each of these aspects of the purchase are the same across decision makers in the state of Michigan, and may influence the way in which the decision maker frames the decision. Likewise, the location of natural resources and seasonal homes is the same for each, and each decision maker reacts to the spatial nature of the task in her or his own way in the framing process. Another feature of the seasonal home decision environment is the type, availability, and cost of information. Gathering direct (ie., first-hand) information requires visiting seasonal homes, which are dispersed over wide areas. This is true regardless of where or how the decision maker begins the search process.

The decision environment concept does not include any measures of individual psychological factors, such as knowledge, awareness, or perception. These variables are part of other concepts in the model.

Each decision maker will begin the decision process with awareness of some part of the universal choice set. This is not part of the decision environment; it is part of the decision maker's experience, and is considered a characteristic of the decision maker. Likewise, the decision maker comes to the process with a set of perceptions and preferences that shape the realm of possibilities s/he conceives. But again, these are personal characteristics.

Decision Frame

The decision frame for seasonal home choice should represent all the decisions made early in the process that help the decision maker create a manageable, understandable choice task. The protocols showed that several decisions fell into this category. One of the first and most difficult framing decisions for most people was establishing a budget. The budget decision was sometimes made incrementally by deciding on a price range, checking what was available in that price range, then adjusting the range (usually upward) if necessary. Sorting out motives for buying a seasonal home was also part of the framing process. Some people also had definite ideas about how much time they had to complete the process. For example, one person who was planning to retire soon felt he had a limited time to find and buy a seasonal home.

Most decision makers formed some ideas about how they would begin searching, e.g, deciding that one member of the family would contact and communicate with the real estate agent and the whole family would visit potential sites once enough alternatives had been identified, or talking with real estate agents in each resort development visited.

Initial decisions about how to judge seasonal homes were also part of the decision frame. Some decided what attributes were not important. Others, especially early in the process, had a list of conditions a home would have to meet. Those people who were interviewed later in the process indicated they had a list of specific criteria when they started looking, but dropped or revised it after searching a few alternatives because it was too limiting. This suggests that the initial criteria of

the decision frame are not necessarily the same as the evaluation criteria used to make the final choice.

In a sense, decision framing occurs continually over the decision maker's lifetime; we perceive, react, plan, and reconcile our goals with the environment's constraints. Some aspects of any decision process are likely to be pre-framed, as when the decision maker perceives the current decision to be similar to an earlier one and so retrieves a set of beliefs or plans s/he used before. For example, a seasonal home buyer may have developed a decision frame for choosing a vacation destination that she now finds useful in the seasonal home decision. This is why the decision maker's characteristics, especially previous experience, are important to the decision process. They essentially capture those aspects of decision framing which took place before the decision process was formally begun.

Search

Search and evaluation behavior determines choice set size, composition, and change over time. By engaging in search and evaluation, the decision maker determines what options are available and how well they mesh with his or her preferences and criteria. The extent of search activity and changes in the choice set can indicate progress toward resolution, as when the decision maker stops searching new alternatives and eliminates most alternatives from the choice set. The pattern of search activity can indicate the decision maker's interest, as when alternatives under serious consideration are searched repeatedly, or when search is nested, ie., narrowed to one subset of the choice set.

The search strategies seasonal home buyers used were flexible and opportunistic. Few decision makers appeared to use the type of search strategy or choice rule that can be expressed in simple, logical terms. The type of information people collected was often a function of what information was available. For example, one couple had tried working with real estate agents, but decided the agents didn't know enough about properties in their price range. They found that only classified

advertisements listed the kind of property they were after. This suggests that many different sources of information, formal and informal, may be used in seasonal home search.

Trips to seasonal home areas were sometimes combined with vacations, and sometimes search occurred as a function of being on vacation. For example, one person talked about searching in an area where they weren't interested in buying, simply because they were vacationing in the area. Several people talked about looking at properties "just for fun".

Another characteristics of search that appeared in many protocols was nesting the search (ie., deciding on an area first, then searching properties only in that area). Nesting was sometimes intentional, as when one couple describes wanting a home in the Traverse City area ever since they honeymooned there, and sometimes a function of working with a real estate agent whose service territory was limited. There were also people who were primarily interested in one area and working with an agent there, but had not stopped considering other areas.

Both searching for fun and the type of nesting that occurred in seasonal home search demonstrate that, in this context, search activity is not, by itself, a good indication of serious interest in an area or property. Nor will the number and type of locations searched necessarily indicate progress toward resolving the decision process, as some seasonal home search activities may be done for fun. Additional measures of progress toward resolution have been added, including the likelihood of purchase and concerns regarding the purchase.

Evaluation

Evaluation practices are often formalized as choice rules, and standard sets or types of choice rules are discussed in decision literature. Operationalizing these concepts for a field study of seasonal home choice requires bridging a large gap. In choice modeling, conclusions about which choice rule is being used are based on applying different possible rules to the data and choosing the one which best

predicts the decision maker's choice. In process tracing experiments, researchers look for patterns of evaluative statements, and determine which rule best fits the pattern of statements.

Evaluation decisions were seldom described in the same level of detail people used to describe the thoughts that went into their framing decisions. For example, people were sometimes able and willing to describe their reasons for removing an alternative from consideration, but often said things like "it wasn't right for us, it just didn't feel right." Some decisions initially sounded like simple non-compensatory evaluations, but after further explanation turned out to be more involved. For example, one couple said they'd decided against inland lake properties because inland lakes "seem dirty". Then they added that they didn't like inland lakes as well as the Great Lakes because "everyone [on an inland lake] has a boat of some kind", and went on to mention other differences they had considered.

Not only did evaluation practices vary across decision makers, they also varied within the decision process of any given decision maker. Search and evaluation behaviors often overlapped, and decision makers seldom made a distinction between the two types of activities. Decision makers were aware of the general characteristics of their search and evaluation practices, but rarely described their practices in detail.

Resolution

All three possible types of resolution were reported in the protocols; choose and purchase an option, delay the choice, and decide not to purchase. Choosing and purchasing a seasonal home often happened quickly, while the decision to delay choice involved a much longer resolution stage. One delay was the result of a decision maker's situation, as when a family delayed their search because they decided to buy a new permanent home, and another a function of the decision environment, as when a person chose an area in which property was not available at the time. The decision not to purchase was made by one

person interviewed, who could not arrive at a good decision frame; any home that would be desirable was too expensive, and he was not willing to adjust his budget because he did not perceive buying a seasonal home as a good investment.

Temporal Dimensions of Complex Choice

While the general model of complex choice does not specify a sequence of events, the protocols indicate that one may exist. Based on those interviews, it appears that the events associated with decision making can be grouped into a series of 3 discrete stages, each characterized by a set of activities and occurring in the same sequence across most decision makers. However, due to the individual nature of decision making, the duration of the stages and of the entire process are expected to vary.

Figure 3 shows the proposed 3 stage model of decision making. The solid arrows indicate the expected sequence of stages. Stage One is characterized by exploratory search and decision framing. The protocols indicate that early search activity is different from that usually associated with decision making, in that it does not focus on specific alternatives or attributes. Instead, it focuses on the decision environment. In what is termed *exploratory search*, people sought information about the range of prices for seasonal homes, the difference between prices and homes in different regions, the marginal cost of each added feature (e.g., lakefront location, proximity to the golf course), the reputations of different developers, and so on. Exploratory search alternated with *decision framing*, the process of making the decisions that constitute a decision frame, with people sometimes making a frame decision, then checking and revising it. For example, one person described deciding to look for a seasonal home in Florida, then visiting a relative there, talking with other friends who had moved out of Michigan, and deciding it would be better to look for a home in Michigan. Stage One ends when the decision maker has formed a decision frame.

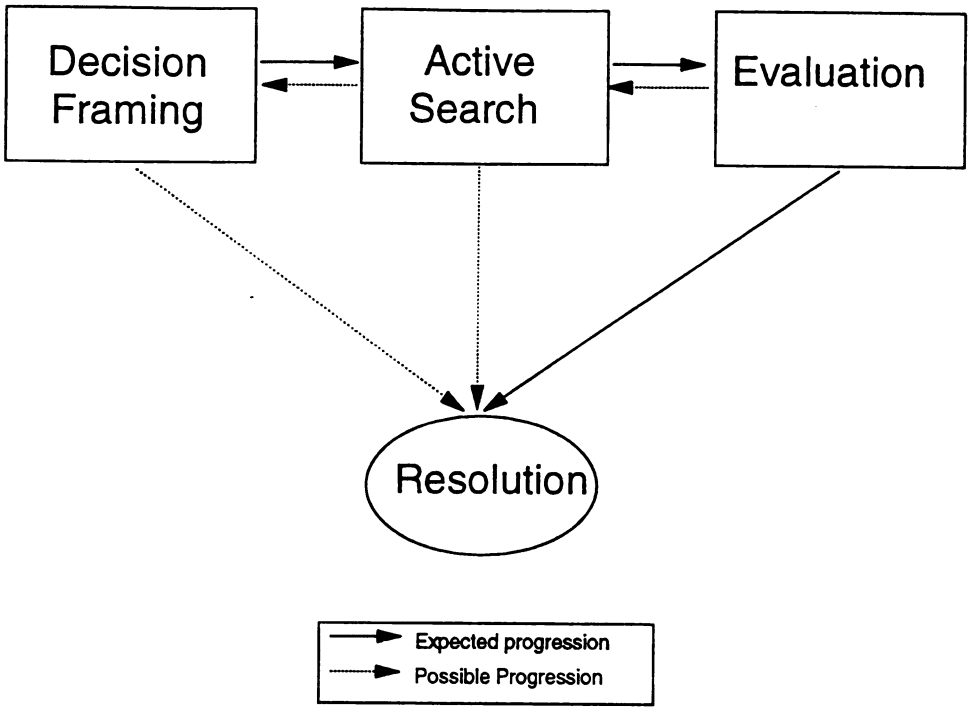

Figure 3. A Three Stage Model of Decision Making

During Stage Two, search activities were directed by the decision frame, focused specifically on alternatives, and helped the decision maker construct or revise their choice set. Many people interviewed clearly identified their transition to this stage, saying things like "we decided it was time to start talking to realtors" or "we started visiting different places every weekend" or "we told the agent 'let's get going on this'". Decision frames may be revised during Stage Two as initial plans and criteria prove unworkable. Stage Two ends when the decision frame and choice set are stable.

The third stage is characterized by decision frame stability and limited search. Search activity tapered off in this stage, and tended to be limited to previously searched alternatives. Transition to this stage was less obvious than the transition from Stage One to Stage Two. People sometimes talked about a lull in search activity, where they were sure about what they wanted and were trying to decide which of several properties was most desirable. During this last stage, the decision

maker is close to deciding how to resolve the decision process and starts to make decisions that facilitate resolution. For example, some people reported reconsidering whether to make a purchase, and if so, how to finance it. Stage Three ends with a decision to choose an alternative and purchase it, to delay the choice and/or purchase, or to make no purchase.

The sequential model assumes that the decision environment (e.g., interest rates, loan availability, building regulations) and the decision maker's situation (e.g., health, marital status, employment) are reasonably stable. If major changes occur in either during the decision process, the sequence of events can be expected to change as well. The decision maker may move back to an earlier stage (e.g., reframing the decision with a larger budget after an inheritance), or s/he may resolve the decision process without passing through all 3 stages (e.g., deciding not to purchase after a spouse's death). Alternative sequences are indicated with dashed arrows in Figure 2.

Conclusions

The process orientation to decision making provides a broad, psychological perspective on choice behavior which is especially appropriate for studying complex choices. In complex choice, many factors other than preferences may influence choice, and the process approach allows investigation of those other factors. One especially important influence is the time required to complete the decision process and make a choice. Because making a complex choice can take months or years, the decision maker may have to cope with changes in the decision environment during the decision process.

While the general model of complex choice borrows from recent work in decision process theory, it also builds on and adds to previous work in several ways. First, the proposed model emphasizes the importance of studying the entire decision process, from the first consideration of the decision to its resolution. Unlike choice models which conceptualize choice as an a-temporal event where one acts on the basis

of preference, this model shows how the many decisions made before a choice can influence preferences and affect how they are acted upon. Second, the proposed model identifies two general sets of antecedent variables, the decision maker's characteristics and the nature of the decision environment, which are hypothesized to influence the decision process. This stands in contrast to the usual practice of testing the influence of a set of researcher-defined variables. By identifying two general sets of antecedents, the model provides a framework for identifying those factors most likely to affect a decision process. Third, the general model of complex choice specifies a central co-ordinating mechanism, the decision frame, that 1) mediates the relationship between antecedent variables and search and evaluation, 2) is responsive to changes in the decision environment and the decision maker's situation, and 3) transmits these changes to the decision making process. The decision frame specifies how, and to what, the decision maker adapts, and how adaptation affects the decision process.

The general model of complex choice was operationalized in the context of seasonal home choice, using the protocol interviews described in Chapter 3. The concepts and relationships proposed in the general model (Figure 1), together with the variables identified in Figure 2 suggest several tentative hypotheses about seasonal home decision making. Although formal hypothesis testing is not possible without a probability sample (Hunter & Brown 1991), the panel survey of seasonal home buyers will be used to gather evidence about seasonal home choice which can support, oppose, or suggest modifications to these hypotheses.

Each arrow shown in Figure 2 represents a hypothesized relationship between the variables in the two boxes it links. Four hypotheses are suggested by the model of seasonal home decision making:

1. The decision making process varies across individuals.
2. Decision framing, or establishment of a budget, timeframe, motives, evaluative criteria, and search strategy, occurs in seasonal home location choice.

3. Characteristics of the decision maker, including household income, number of seasonal home rentals, and recreational preferences, influence elements of the decision frame.
4. Decision frame characteristics (budget, time frame, motives, search strategy, and evaluative criteria) influence search and evaluation behavior (search activities, rules of evaluation).

In the model of complex choice, choice is not instantaneous, but occurs over time and is influenced by the passage of time. The protocols suggest that seasonal home decision making follows the same sequence across most decision makers. Three distinct stages of decision making, each characterized by a certain type of search activity and decision frame, were identified.

Figure 3, the three stage model of decision making, also implies hypotheses about the temporal dimensions of decision making:

1. At any time during the decision process, a decision maker's activities can be used to assign her/him to one of three decision making stages.
2. Decision makers move from one stage to another during the decision process.
3. The sequence of the three stages may differ across decision makers due to changes in the environment that occur during the decision process.

Chapter 5 explores the first set of hypotheses, using data from the longitudinal survey of seasonal home buyers. In Chapter 6, the second set of hypotheses dealing with the temporal dimensions of seasonal home choice will be explored. Chapter 7, the final chapter, gives conclusions from this study and recommendations for further research.

CHAPTER FIVE

LONGITUDINAL SURVEY: METHODS AND DESCRIPTIVE RESULTS

Methods

This chapter describes the survey methods used to test the proposed model of the seasonal home location decision process and the three stages of decision making. The proposed model describes seasonal home choice as a dynamic process which occurs over an extended time period, where decision framing plays a key role in allowing the decision maker to adapt to changes in the decision environment. For most decision makers, there appear to be three stages of decision making which occur in sequence, unless external events disrupt the decision process.

Although survey research is not common in the study of decision making, it is appropriate for this research because it describes the decision process as it unfolds in its natural environment. The decision maker's environment, motives, perceptions, and pace of decision making are not altered by the survey. Use of the laboratory-based techniques more common in decision research would disrupt and alter the decision process.

Unlike most decision research which records events concurrently, this survey was used retrospectively. Critics of retrospective methods claim that the delay between decision making and response makes it likely that details will be forgotten[1]. To minimize the potential for recall bias, an effort was made to sample only people currently considering a seasonal home purchase. Questions regarding past events in the decision process were asked in the context of the past three months, at a general level. Most questions focus on current events and perceptions.

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[1] For a discussion of retrospective methods in the context of this study, see Chapter Three, Retrospective Verbal Protocols.

A panel design was used for surveying seasonal home buyers, with surveys administered at two points in time to each group of subjects. The panel survey allows observation of changes over time, and the relationships between these changes and the subsequent course of the decision process can be examined. Because the survey instrument is more structured than the verbal protocol interviews, the survey data allows for exploration of the relationships proposed in the model of seasonal home decision making.

Survey Objectives

The purpose of the survey is to provide an intermediate step between the semi-structured, highly individualistic protocol interviews and a highly structured, general model or models of the complex choice process. The surveys are intended to provide data which is comparable across individuals so that patterns can be discerned, yet still sensitive to individual variations in the process. This phase of the study is not intended to estimate model parameters, to test hypotheses, or to estimate sample or population means, but rather to further describe the patterns and the variations in the seasonal home decision process.

The objectives of the survey of seasonal home buyers are to:

1. Measure the decision making process with a broader sample of seasonal home buyers;
2. Identify the sequence and stages of the seasonal home decision process;
3. Identify relationships among the variables specified in the seasonal home location decision process model; and
4. Identify relationships between characteristics of and changes in the seasonal home location decision process.

Study Population and Sampling Procedures

The population for the panel survey includes only those decision makers who are currently looking for a seasonal home, so that an active

decision process and the changes that accompany it can be observed.

A two stage process was used to identify a sample of seasonal home buyers. In the first stage, a sample of real estate agencies operating in seasonal home areas of Michigan was drawn from the Michigan Association of Realtors' 1991 Membership Roster. These agencies were contacted and asked to provide lists of clients in the market for seasonal homes. In the second stage, the lists obtained from real estate agencies were used to survey seasonal home buyers. The details of sampling and contacting first real estate agencies and then seasonal home buyers are presented below. This is followed by a discussion of questionnaire development, and the chapter ends with a description of the seasonal home buyers participating in the study.

Sampling Real Estate Agencies

The Michigan Association of Realtors (MAR) represents real estate agents in the state of Michigan. Its members are organized into 10 geographic districts, each made up of two or more, usually multi-county, boards of Realtors. Figure 4 shows a map of MAR districts. The seasonal home areas across Michigan differ in price, resource availability, and distance from population centers in southern Michigan. Due to these differences (and perhaps to long tradition and social networking as well), the seasonal home owners in areas across the state are expected to vary demographically. Real estate agencies from many areas were sampled in order to include seasonal home owners from many different areas.

Using 1990 Census data (U.S. Dept. of Commerce 1991), counties and general regions of seasonal home concentration were identified. Based on this analysis, a sample of real estate agencies was drawn primarily from three MAR districts; District 9 in the upper peninsula, District 10 in northern lower Michigan, and District 4, in west central Michigan. One board from District 3, in east central Michigan (at the tip of the thumb), was also included. Real estate boards were chosen from within

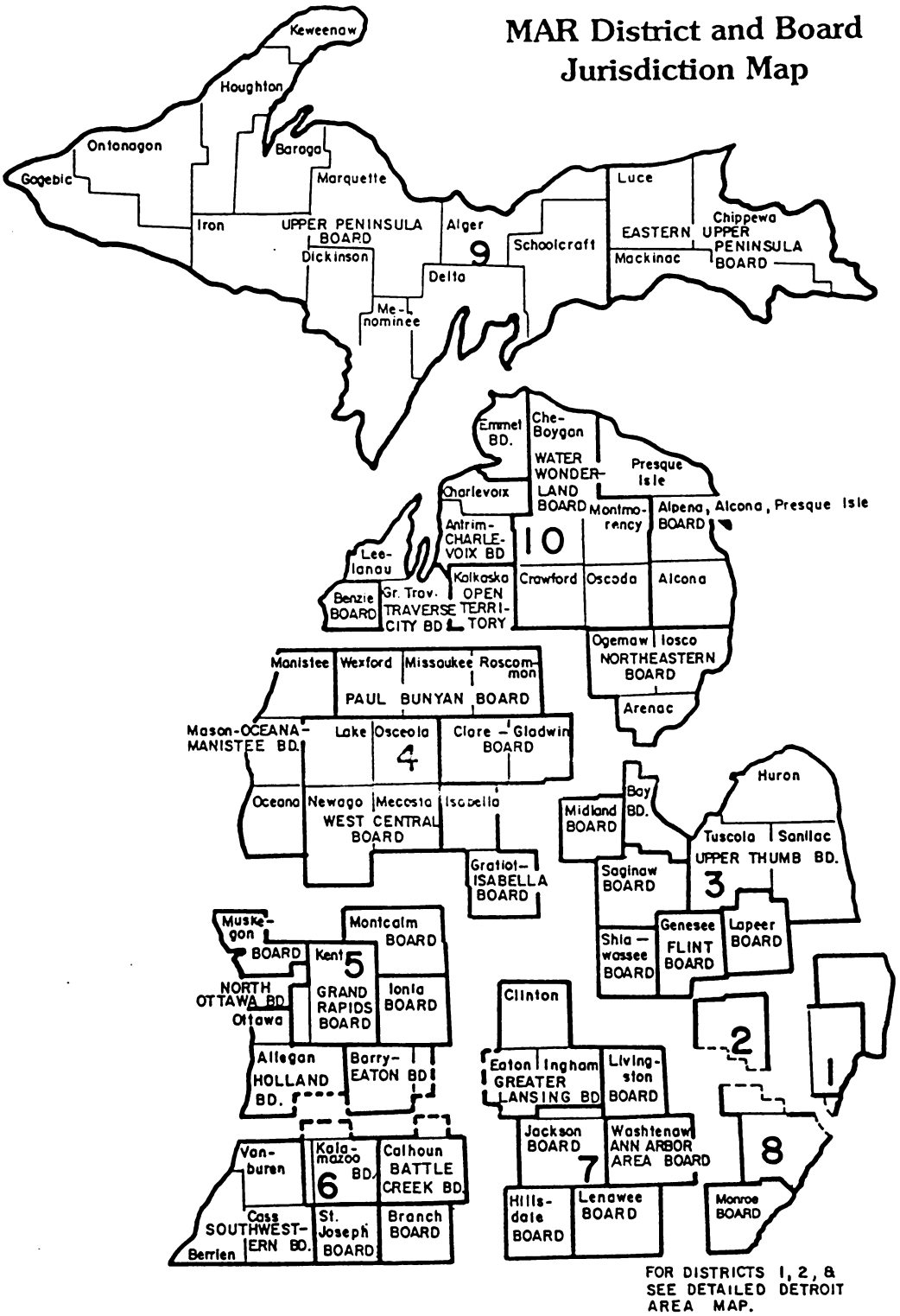

Figure 4. Michigan Association of Realtors' Districts

Table 1. Number of agencies and sampling rate by Michigan Association of Realtors' region and board.

Region	Board	Number of Agencies	Rate
3	Upper Thumb	15	1/2
4	West Central	23	1/3
4	Mason/Oceana/Manistee	33	1/3
4	Paul Bunyan	34	1/3
4	Clare/Gladwin	13	1/2
10	Traverse City	63	1/3
10	Benzi County	6	1
10	Antrim/Charlevoix	35	1/3
10	Emmet	28	1/3
10	Water Wonderland	25	1/3
10	Alpena/Alcona/Presque Isle	21	1/3
10	Northeastern	30	1/3
9	Eastern Upper Peninsula	8	3/4

these districts, again based on the Census data. Agencies were chosen from each board at a rate of 1/3. The rate was increased in some areas where few agencies exist (Table 1).

The real estate agencies sampled were sent a letter soliciting their assistance in a study of seasonal home owners (Appendix A). The letter was written and reviewed in consultation with a real estate agent. It offered an explanation of the study's purpose, scope, clients, and applications of the results. Agencies were promised the opportunity to review the cover letter and questionnaire, and told that access to study results would be limited to those agencies that cooperated in the study.

Discussions with real estate agents indicated they would be hesitant to share their client lists because of concerns about

confidentiality. To address these concerns, the letter stressed that client lists would not be shared with any other organization and would be destroyed upon conclusion of the study. Agencies were given three options for providing a sample of their clients; OPTION 1: the agency sends a list of names and addresses to the study team; OPTION 2: the study team sends stamped envelopes containing the survey and cover letter to the agency, to which the agency adds mailing labels and mails from their offices; and OPTION 3: the agency distributes survey envelopes to clients who visit their office. The letter notes that those choosing options 2 or 3 would be asked to keep records of the client's name by questionnaire number so that first and second surveys could be matched.

A stamped, self-addressed postcard was included with the letter. On it, agencies were asked to indicate whether they would co-operate, and if so, which option they would prefer for providing the sample (see Appendix A). Upon receipt of the returned postcards, agencies were contacted by telephone and arrangements made for participation. For agencies willing to release their client list (option 1), the number of client names to be provided and the date for their transmittal was arranged. For agencies choosing option 2, the number of clients to be sampled was agreed on, record keeping procedures reviewed, and arrangements made to send the envelopes to the agencies. For those choosing option 3, the agency was asked how many agents in the office would be participating, and asked to estimate the number of survey forms each agents was likely to pass out.

Responses. Each MAR region sampled, with the exception of region 9, were represented among the agencies that agreed to co-operate. Within the chosen regions, most boards were also represented. The exception was in region 4, where only the West Central board was represented. Each board in Region 10 was represented, except for the Antrim-Charlevoix and Northeastern boards.

In early June, lists of client names and addresses were received from all but three of the agencies that chose option 1. The remaining three declined to participate. Mailing labels were made from the lists.

Materials were mailed to real estate agencies choosing options 2 and 3. For option 2, these included stamp-embossed, pre-assembled, numbered survey envelopes in sequential order, together with record keeping sheets and instructions. The record sheets had spaces to record the questionnaire number, client name and address, and the agency's name. The agencies were instructed to (1) fill out the record sheets completely, (2) mail the surveys within the next two weeks, (3) copy the sheets - either with or without the client name and address visible, and (4) mail the record sheet copy to us in the business reply envelope provided. This allowed us to be sure that records had been kept.

For agencies that chose option 3, the materials again included pre-assembled survey envelopes (unstamped), divided among two or more large envelopes, one for each participating agent in the office. The large envelopes had record keeping sheets affixed to them to facilitate record keeping. Instructions for their use were included. There were no complaints about or difficulties with the record keeping procedures.

In late summer, the agencies were contacted and reminded that another mailing would need to go out in late September. At that time, they were also asked whether they had collected additional client names over the summer which they were willing to give us, in order to form a second panel to be surveyed in the fall and winter. Agencies in Cheboygan, Au Gres, and Traverse City supplied a total of 47 more names which formed the second panel sample.

Surveying Seasonal Home Buyers

The sampling plan. Two groups of seasonal home buyers were surveyed, each at two points in time separated by a three month interval. Surveying home buyers twice, with a 3 month interval between surveys, allows identification of changes over time via two period

measures. Surveying participants a third time would have resulted in few responses due to attrition as decision makers purchased seasonal homes, dropped out of the market, or lost interest in participating in the study. The three month interval between waves was judged to be long enough so that the decision maker had spent some time and effort looking for or considering a seasonal home, without being so long that accurate recall of decisions and activities was difficult.

It is possible that seasonal home search activities vary across the year because the use of seasonal homes is tied to recreation and to the seasons. To test for this possibility, two panels were used. The first panel (referred to as Group A) received surveys in July and October, and the second panel (Group B) in October and in March.

Field procedures. Each subject was sent an envelope containing (1) a questionnaire booklet, (2) a cover letter, and (3) a business reply envelope (Appendix B). Three months after the first survey was mailed, the second questionnaire was sent to those members of the sample who had returned the first questionnaire and indicated their willingness to receive a second questionnaire.

Responses. First questionnaire response rates for groups A and B were similar, with group B panel members somewhat more willing to receive a second survey (Table 2). Response rates were higher for the second questionnaire than the first in both groups.

Sampling limitations. There are two limitations associated with the sample used in this study. First, it is not a probability sample. It is not possible to statistically generalize results based on this sample to seasonal home buyers as a group, or to make judgements of the statistical significance of between-group differences within the sample (Hunter & Brown, 1991). However, the goals of this study (see p.6) are to develop a model of complex choice which can be applied to the seasonal home location decision process. The ability to generalize results to a population is not essential at this stage in the

Table 2. Survey distribution and response rates

Panels	Questionnaire One			Questionnaire Two		
	Mailed	Responses		Mailed	Responses	
		Num.	Pct.		Num.	Pct.
Group A (July/Oct)	237	61	26%	40	22	55%
Group B (Oct/Mar)	47	13	28%	11	8	73%
Total	284	74	26%	51	30	59%

development of the model. The findings of this study are most important for what they imply about the model, rather than about the population of seasonal home buyers. As development of the complex choice model proceeds, it will eventually be desirable to test the model and generalize findings to a population of decision makers.

The second limitation of the sampling plan is that it systematically excludes certain types of seasonal home buyers. This sample does not include buyers who do not work with a realtor, and is less likely to include those who worked with real estate agents but contacted them late in the decision process. The extent of this bias depends on (1) how current the agencies' lists of clients were; and (2) decision makers' preferences for contacting a real estate agent earlier versus later in the process.

Measurement

The measurement section is organized around the concepts of the complex choice model. The questions used here were developed based on a review of the literature and the protocol interviews (see Chapter 4). The measurement section is followed by a discussion of questionnaire design. Figure 5 gives a list of the topics covered and variables measured in the questionnaires.

Decision Maker

Characteristics of the decision maker which were measured include those that relate to the decision maker's perceptions, knowledge, and ability to act in the decision environment, including income, education level, previous seasonal home use, and travel experience. The real estate agent who previewed the questionnaire was concerned about including an income question, in that clients are often hesitant to discuss income with real estate agents. To maximize response to this question, only three broad income categories were used.

Because the seasonal home is likely to be used by the whole household, questions about the composition of the family and the family's interests are also relevant. The possible link between seasonal homes and retirement suggests including measures of how close the decision maker is to retirement, and what plans s/he has made.

Decision Frame

Both motives for seasonal home purchase and concerns about the purchase were included as measures of the decision frame. The protocols indicated that people had only a vague idea about how much time they wanted or expected to spend searching for a seasonal home, so a screening question was used to determine whether a time line existed, then what the time line was. Questions about the monetary budget ask for more specific responses, as the protocols indicated decision makers had a clear concept of how much money they would spend.

Initial evaluative criteria and search strategy are part of the decision frame, but the protocols indicate that both are subject to change throughout the decision process. This poses a problem for measuring them, because unless the decision maker is in the first stage of the process, they are no longer "initial" concepts. The criteria and search strategies measured in this study are considered under search and evaluation, are treated as "state" variables, or measures specific to one point in time, and are expected to change over time.

I. DECISION MAKER

A. Personal: age, gender, education, occupation, retirement status and plans.

B. Family: family recreation activities, ages of children at home, family members' involvement in seasonal home decisions.

C. Experience: travel experience, whether friends and relative own a seasonal home, seasonal home rentals over the past ten years.

D. Decision making style: decision making patience and care.

II. DECISION FRAME

A. Budget: Minimum, maximum, and preferred spending on seasonal home, change in budget.

B. Timeline: Purchase timeline, purchase probability w/in 12 months & 5 years, change in timeline, purchase intentions.

C. Motives: Motives and concerns associated with purchasing a seasonal home.

III. SEARCH AND EVALUATION

A. Criteria: Seasonal home & neighborhood type, preferred distance from permanent home, recreation activities important in seasonal home decision, desirability of seasonal home area & property attributes, importance of area & property attributes, willingness to pay for additional area & property attributes.

B. Information Use: initial information source for seasonal home areas, frequency information source use.

C. Search: Time of search initiation & realtor contact, number of areas visited over past three months, choice set size, change in choice set over past three months, information collection and use, reliance on real estate agents, nesting and limiting search, combining search with vacations.

D. Evaluation: evaluation strategies, change in criteria for seasonal home area & property, decision to focus on one area, probability of purchase in that area, methods of comparing options, use of compensatory or non-compensatory evaluation methods.

Figure 5. Variables measured

Search and Evaluation

Questions about preferences for attributes are divided between those relevant to the seasonal home area, defined as the community or county in which the home is located, and those that pertain to the seasonal home property, defined as the home itself and the lot or land it stands on. Presenting the questions in this way helps clarify the referent for the questions. For example, preference for water resources can mean many things; a decision maker may wish to have a view of the water but not water frontage, or to live in a community where water resources are present (e.g., for a recreational activity), but not pay the premium for either the view or the frontage. To avoid confusion, questions were asked about preference for water in the context of the seasonal home area, and for water frontage and view in the context of the seasonal home property.

A distinction is also made between the importance and desirability of attributes. Ranking attributes by importance indicates which factors are most likely to be considered in choosing a location, but not whether the decision maker likes or dislikes them, or wants more or less of them. Respondents were asked to rate the importance of attributes on a 3 point scale. Desirability measures show relative likes or dislikes without regard to whether the attribute is important enough to actually be considered when making a choice. Area and property attributes were rated on a 5-point scale measuring desirability.

In addition to the basic measures of search activity (ie., information source use, choice set size, number of areas visited), statements were developed to measure attitudes toward search and evaluation practices. Decision makers were asked to respond on a 5 point scale ranging from 1=strongly agree to 5=strongly disagree. Some statements relate to a general approach, e.g., "I rely on realtors to identify suitable properties", while others are indicative of search strategies associated with specific choice rules, e.g., "I gather the

same kind of information about each property so I can compare them", an approach consistent with a compensatory choice rules, or "I consider seasonal homes in only one area at a time", indicating a nested search strategy. These measures were developed on the basis of the literature review and protocol results. While the concepts measured by these questions are common in decision process research, the method used for their measurement is unique to this study.

Questionnaire Development

Two questionnaires were developed to be used sequentially in the panel study. Recognizing the possibility of attrition before the second survey, the first questionnaire includes most variables necessary for describing seasonal home buyers, as well as some measures of change. The second form focuses almost exclusively on measuring change.

A mailed, self-administered booklet style questionnaire was developed for the first wave of the panel study. The booklet is 4 folded, legal sized sheets and includes an introductory cover page and 7 small pages of questions. Each standard sized page of text was reduced to fit on an 8" by 7" page, or half of a legal sized sheet. The questionnaire and the cover letter which accompanied it are shown in Appendix B.

The questions generally progress from less difficult to more difficult topics and/or formats. The questions which ask the respondent to recall activities over the past three months, which require more effort to answer, appear near the end of the form to minimize refusal.

The second survey, shown in Appendix C, is four pages long. The number of questions included in the second survey was limited and their sequence changed to minimize chances the respondent would refuse the questionnaire on grounds that it was the same as the first. The purpose of repeating some questions is explained in the cover letter (Appendix C). The questionnaires were reviewed by colleagues, by a seasonal home buyer who was working with a real estate agent, and by a real estate

agent. Some revisions were made based on their comments.

Data Analysis

The SPSS package was used to enter, clean, and analyze data. Data were arranged in 4 primary files, which were then combined to make 4 composite files (Figure 6). The first two composite files, shown as "A&B 1" and "A&B 2", combine Group A and B responses to the first and second questionnaires, respectively. The third combination file, labeled "A&B 1&2", matches responses to both questionnaires for a given subject. It contains all variables from the first and second questionnaires, but only as many cases as the "A&B 2" file, since those who did not complete the second questionnaire are excluded. Depending on the analysis, one or more of these composite files was used.

Results

Sample Characteristics

Because little is known about seasonal home owners in Michigan, differences between this sample and the population of seasonal home buyers are difficult to identify. However, data from the Census of Housing (U.S. Dept. of Commerce, 1991) suggests two possible differences between seasonal home owners and the potential buyers sampled for this study. First, this sample appears to include relatively few buyers in lower price brackets. Subjects were asked to state minimum, preferred, and maximum amounts they planned to spend on a seasonal home. The results, reported in Table 4, indicate that few were in the market for the kind of low value properties common in many Michigan seasonal home areas (e.g., rustic cabins in rural area used for hunting or fishing). A second and related difference is that, when asked what type of setting or neighborhood they prefer, few buyers indicated they prefer secluded or rural areas. Again, many Michigan seasonal homes are concentrated in counties which are almost entirely rural. This data describes existing seasonal homes; the differences observed may reflect sampling bias, or they may indicate that seasonal home patterns in the state are changing.

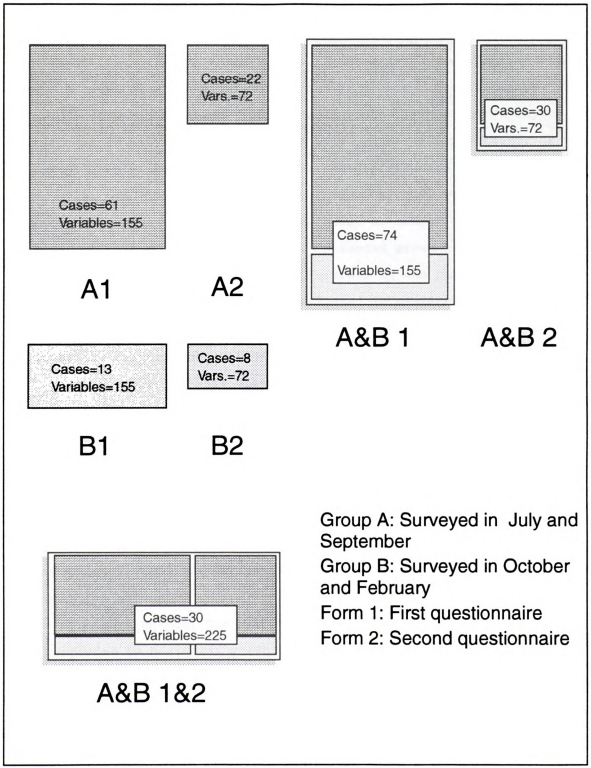

Figure 6. Configuration of Analysis Files

Respondents were given the option of checking a box on the back page of the questionnaire to indicate they did not wish to receive a second questionnaire in three months. There were 23 respondents (31%) who indicated they did not want to receive a second questionnaire. This "no-second" group differed from the rest of the sample in two ways. First, nearly half of them indicated they had already purchased, or were bidding on, a seasonal home. Second, the distribution across income categories was different for the two groups, with no-second group members more likely to fall into the lowest or middle of the three income categories. Where 32% of the no-second group reported incomes below $50,000, only 8% of those who remained on the panel were in that category. This difference is also reflected in preferred spending. The no-second group preferred to spend, on average, $68,000, while for the rest of the sample, the average was $101,000.

Few differences were observed between those sampled early in the summer (group A) and those sampled in the fall (group B); the samples appear to be well matched (Table 3). The only exception is that Group B includes a slightly higher proportion of buyers looking for rural seasonal homes (31% vs 9% of group A); this is also reflected in the proportion of Group B subjects looking for cabins (46%). The two samples, groups A and B, will be combined for most analyses. Descriptive results are presented separately when there are differences between the groups.

Decision Makers. The results reported here are based on analysis of responses to the first questionnaire, shown in Appendix B. Question numbers (e.g, Q1) indicate which measure or measures generated the results.

Many decision makers had extensive experience using seasonal homes. When asked if they had friends, relatives, or both who own seasonal homes (Q 3), almost all of the sample indicated they did (Table 3). In reponse to an open ended question regarding the number of times

Table 3. Selected characteristics of seasonal home buyers

VARIABLE	GROUP A N=61		GROUP B N=13		TOTAL SAMPLE N=74	
	Num.	Pct.	Num.	Pct.	Num.	Pct.
Age						
> 30	1	2%	0	0%	1	1%
30-39	12	20%	3	23%	15	21%
40-49	22	37%	6	46%	28	39%
50-59	17	29%	1	8%	18	25%
60+	7	12%	3	23%	10	17%
Sex						
Male	45	76%	10	77%	55	76%
Female	14	24%	3	23%	17	24%
Household Income						
< $50,000	7	13%	3	27%	10	15%
$50,000-$100,000	36	65%	5	46%	41	62%
$100,000 +	12	22%	3	27%	15	23%
Education						
High School	13	22%	2	17%	15	21%
Assoc. or technical	12	20%	3	25%	15	21%
Bachelor's	17	29%	3	25%	20	28%
Graduate or profess.	17	29%	4	33%	21	30%
Occupation[1]						
Exec., admin., mgr.	15	31%	5	38%	20	32%
Professional	16	33%	4	31%	20	32%
Tech., sales	10	20%	1	8%	11	18%
Services	2	4%	3	23%	6	8%
Production, craft	3	6%	0	0%	3	5%
Not employed	3	6%	0	0%	3	5%
Retirement Status						
Retired	11	19%	4	30%	15	21%
plan to retire. . .						
w/in 5 years	5	8%	0	0%	5	7%
in 6-10 years	10	17%	1	7%	11	15%
in 11+ years	13	23%	2	15%	15	21%
not yet planning	17	30%	6	46%	23	33%
Family structure[2]						
no children at home	26	44%	5	42%	31	44%
children < 12yr	9	15%	5	42%	14	19%
children > 12 yr	27	44%	3	23%	30	41%
Friends, family own seasonal homes	57	93%	13	100%	70	94%
Travel experience[3]						
Extensive	26	45%	5	38%	31	44%
Moderate	23	40%	6	46%	29	41%
Limited	9	15%	2	15%	11	15%

1. Responses to open ended question were grouped according to the classification of occupations used by the Census bureau.
2. Totals add to more than 100 because multiple responses are possible.
3. Travel experience ratings combine equally weighted responses to questions about midwest, U.S., and general travel experience.

they had rented a seasonal home over the past 10 years, 75% stated they had rented at least once, while a quarter had rented more than 10 times, averaging more than one rental per year (Q 4). Most respondents considered themselves well travelled (Q 27).

Decision makers were asked whether they had retired, and if not, whether and when they planned to retire (Q 34). Fifteen respondents were retired, 16 more are planning to retire within the next decade, and the remainder have longer term plans, or no plans, for retirement. Water-based activities such as boating, fishing, and swimming were most often listed in response to an open ended question about the recreation activities "you and your family enjoy most" (Q 26). Forest-based activities, including hunting, bird watching, cross country skiing and snowmobiling, were the second most popular grouping. One third of the sample listed recreation activities which are facility dependent, such as golf and downhill skiing, indicating that the location of seasonal homes relative to recreation facilities is significant for some potential buyers. In addition to the question about family recreation activities, respondents were asked which activities they consider most important when choosing a seasonal home location, and most people gave the same set of 3 activities in response to each question.

Decision Frames. Question 8 asks whether the respondent has a firm date or deadline for purchasing a seasonal home, or a flexible deadline, or no deadline (Q8). Almost all responded that they had no deadline for completing the seasonal home choice. Almost all, however, did report a having a budget (Q10), and most listed the minimum, preferred, and maximum amount they planned to spend (Table 4). Respondents were asked to list the minimum, preferred, and maximum number of miles they would travel to a seasonal home (Q 11). Like those we interviewed using the protocol method, these seasonal home buyers preferred areas located 2.5 to 4 hours driving time from home (Table 4). This may reflect preferences for travel, or for the areas available at these distances.

Table 4. Preferred distance, purchase price, and purchase probability.

Decision Frame Variables	Mean	Median	Mode	Max	Min	Range
Preferred Distance from Home (miles)	191	175	150	450	25	425
Preferred Purchase Price ($000's)	93	90	100	200	20	180
Purchase Probability	100%	80%	60%	40%	20%	0%
within 12 months	22%	15%	14%	15%	22%	14%
within 5 years	45%	22%	20%	8%	2%	1%

Subjects were asked to rate their likelihood of purchasing a seasonal home within the next 12 months, and within the next 5 years, on a 6 point scale ranging from 0% to 100% in 20% intervals (Q 9a & 9b). Most respondents indicated a better than 60% chance of making a purchase within 5 years; the likelihood of buying within 12 months, however, varied considerably across the sample.

A list of motives, generated from the verbal protocol interviews, was presented, and respondents were asked to rate the importance of each on a 4 point scale (Q 5). The most important motive for the majority of seasonal home buyers is the desire to "get away and relax" (Table 5). Investment was the only motive listed to receive more than a few ratings of "not important". Using a similar format, subjects were asked to rate whether each concern was very, somewhat or not important (Q 6). The most important concern for the sample as a whole is the ability to afford the purchase. The importance of this concern underscores the nature of shopping for a seasonal home, where the decision to consider a purchase often appears to come before the decision maker is certain that the purchase is financially possible.

Table 5. Motives and concerns of decision makers

Concerns	Major Concern	Minor Concern	Not a Concern
Not sure I/we can afford it	48%	34%	18%
Time or expense of maintenance	31%	52%	16%
Time or expense of travel to and from home	23%	42%	35%
Not familiar enough w/seasonal home areas	6%	26%	68%
Concerns about security and vandalism	26%	55%	19%
Might limit travel to other vacation areas	8%	49%	42%

Motives	Extremely Important	Very Important	Somewhat Important	Not Important
Outdoor recreation	54%	34%	12%	0%
Get away & relax	68%	30%	2%	0%
Be with friends & family	25%	34%	32%	8%
Possible retirement home or area	34%	31%	24%	12%
Investment	21%	32%	32%	16%

Information Search and Evaluation

A compound question was used to determine which communities the decision maker had considered as seasonal home locations and how they initially learned about each community (Q 17). The way in which seasonal home buyers most often learned about communities was different for the two groups (Table 6). Group A had most often learned about communities by vacationing there, but Group B had more often become aware of seasonal home areas through friends and family living in the community. This difference may be related to the type of home and setting the two groups were seeking. As noted earlier, group B had more people looking for secluded rural locations, which tourists would not be as likely to visit. Real estate agents were not an important first source of information for either group.

Respondents were asked how often they had used different sources of information over the past 3 months. Subjects were asked whether they had never, seldom, sometimes, or often used each source (Q 22). Two thirds of the sample reported using personal visits and real estate guides "sometimes" or "often", while realtors were less often used. Although friends and family were important in becoming familiar with a community initially, 3/4 of the sample reported relying on them as an information source only infrequently over the preceding 3 months.

When asked how many communities they had visited over the past three months (Q 23), groups A and B reported a similar number of visits, with group B somewhat more active in visiting communities than group A (Table 7). Few in either group had narrowed their search to one community (Q 24), and 6 or more communities were being considered by over 1/4 of the sample (Table 6).

A list of statements intended to capture variations in search patterns and practices, evaluation rules, and decision making style in general were present in a Likert-format, where respondents were asked to rate their agreement on a 5 point agree-disagree scale (Q 20). The

Table 6. Search activity

Variable	Group A N=61	Group B N=13	Total Sample N=74
Initially learned about communities being considered through[1]. . .			
Formerly lived there	16%	54%	23%
Friends/relatives live there	53%	62%	54%
Read about it	23%	23%	23%
Realtor told me	13%	16%	15%
Vacationed there	77%	46%	72%
Number of Communities Being Considered			
1	11%	15%	12%
2	16%	8%	15%
3	22%	8%	19%
4	13%	23%	15%
5	10%	8%	9%
6	25%	38%	27%
Communities considered, mean/median/mode	3.7/4/4	3.6/3/6	3.7/4/6
Number of areas visited, past 3 mo.[2] (mean/median/mode)	2.4/2/2	2.9/3/3	2.5/2/2

1. Totals add to more than 100 because an initial information source was indicated for each community listed (up to 6 possible).
2. Questions regarding the past three months refer to April, May and June for Group A, and to July, August, and September for Group B.

pattern of responses illustrates the variability of decision making across individuals (Table 8). While the responses systematically tetoward the positive side of the scale, there are individual differences in decision making style evident in the responses. Almost all respondents agreed with general statements such as "I am a careful decision maker", and "there are very specific features I'm looking for in a seasonal home." When it came to specific practices and attitudes, however, responses were more varied. For example, "I am not willing to look at individual properties until I decide the area is acceptable" generated a range of responses, as did "I keep written records of the properties I've considered or looked at", and "I rely on Realtors to identify suitable properties".

When asked to choose the three most important factors in a seasonal home area, 81% of the sample listed water among the top three factors. Recreation opportunities and uncrowded areas were listed by a third of respondents, and forests were among the most important features for 24% of the sample. Water also appears frequently among the top 3 property features. Water frontage was listed among the most importantly 69%, and view of the water by 31%. Privacy and property value appreciation were also important property features.

Willingness to pay for one additional seasonal home attributes reinforces the importance of water and other natural features (Table 8). Ranked by the proportion of non-zero bids, Great Lakes waterfront, view of the water, and inland lakes waterfront were the top three features. When desirability is measured rather than importance, water features were still rated highest among both property and area attributes (Table 9). Few area or property attributes were considered undesirable, with the exception of rental income.

Table 7. Search strategies and evaluation approaches

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I combine looking for a seasonal home with vacation trips.	37%	44%	10%	7%	1%
I rely on realtors to identify suitable properties.	11%	32%	42%	11%	3%
There are very specific features I'm looking for in a seasonal home.	51%	35%	14%	0%	0%
I like to look at a number of properties before making an evaluation.	54%	39%	7%	0%	0%
I gather the same type of information about each property so I can compare them.	38%	46%	13%	3%	0%
I only investigate properties that meet my criteria.	29%	35%	25%	11%	0%
I keep a file of literature about seasonal homes or areas.	31%	36%	22%	10%	0%
I am a careful decision maker.	58%	34%	6%	1%	1%
A single factor often determines whether a property is acceptable to me or not.	22%	27%	34%	14%	3%
I keep written records of properties I have considered or looked at.	16%	43%	27%	11%	3%
I consider seasonal homes in one area at a time.	10%	26%	24%	33%	7%
Immediately after looking at each property I evaluate it and decide whether or not it is worth seriously considering.	37%	55%	7%	0%	1%
I get impatient with long decision processes.	13%	25%	30%	24%	8%
I am not willing to look at individual properties until I decide the area is acceptable.	14%	45%	22%	10%	9%
When I am ready to make a final decision I will review all of the properties I have looked at.	18%	52%	16%	13%	1%

Table 8. Willingness to pay for seasonal home location attributes

Attribute	% Who Bid	Average Non-Zero Bid	% Zero Bid	Average Bid (w/zeros)
Great Lakes waterfront	82	23%	18	18%
Outstanding water view	81	14%	19	11%
Inland lakes waterfront	77	20%	23	16%
Outstanding forest view	68	9%	32	6%
River frontage	60	10%	40	5%
Complete privacy	55	12%	45	6%
Security arrangement	55	9%	45	4%
40 acres of forest land	50	12%	50	5%
An hour closer to home	50	10%	50	4%
Adjoining trails through public land	42	8%	58	3%

Relationships Among Decision Making Variables

The model of complex choice suggests that there are relationships between decision makers and decision frame, and between the decision frame and search and evaluation activities. In addition, the criteria used in search and evaluation may be influenced by the decision maker's characteristics.

The decision maker's approach to the decision process may be related to her or his characteristics and situation. One expected link is between income and budget. Income was measured using three categories, (1) less than $50,000 (2) $50,000 to $100,000, and (3) over $100,000. As expected, those in the highest income class had the largest average budgets for seasonal homes (Table 11). It is interesting to note

Table 9. Desirability of area and property characteristics

Variables	Mean	Extr. Desir. (1)	Desir -able (2)	Neutral (3)	Undesir -able (4)	Extr. Undesir (5)
Area Characteristics						
Water	1.1	89%	11%	0%	0%	0%
Forests	1.8	34%	54%	10%	1%	1%
Recreation opport.	1.8	42%	40%	17%	1%	0%
Medical Facilities	2.1	20%	51%	27%	1%	0%
Shopping areas	2.5	9%	41%	39%	7%	4%
Cultural & Social activities	2.5	6%	38%	53%	1%	1%
Near friends/relatives	2.6	7%	30%	57%	4%	1%
Property Characteristics						
Water frontage	1.4	75%	15%	8%	0%	1%
Water view	1.4	69%	23%	8%	0%	0%
Forest view	1.8	32%	49%	18%	0%	0%
Property appreciation	1.9	27%	58%	12%	3%	0%
Security arrangements	2.1	15%	59%	24%	1%	0%
Forest acreage	2.2	22%	46%	28%	3%	1%
Rental Income	3.0	5%	18%	50%	22%	5%

that average budgets for each income group are approximately equal to a year's income. For the low and middle income groups, the median budget is near the high end of the income range, but for the highest income group, the median budget is near the low end of the income range. While this may be a function of where subjects fall in the income range (e.g., modal income for group 2 could be as high as $99,000 and for group 3 as low as $101,000), it may also be that the seasonal home purchase accounts for a much larger share of the household budget for those in the two lower income groups. Ratings of concern about affordability would appear to support this concept. There is a moderate relationship between concern and income, with those in higher income groups reporting less concern about affordability. This pattern is the reverse of concern ratings in general, however; when all 6 concern ratings are summed, the average concern rating by income group show concerns increasing with income (Table 10).

One consequence of stretching the household budget, as those in lower income groups appear to be doing to a greater extent, is that the seasonal home budget may be less flexible. One measure of flexibility is the range of the budget, measured by the difference between minimum and maximum planned spending. Group 3, with the highest average income and budget, also has the largest budget range, both in absolute terms and expressed as a percentage of preferred spending (Table 10). The relative flexibility of spending plans may also explain the differences in expressed willingness to pay for additional attributes across the income groups (Table 11). The willingness to pay question clearly asks for a percentage of the base price, rather than an amount, that the respondent would pay to gain some attribute. This is intended to make the question neutral with respect to the respondent's ability to pay. Yet the results indicate that those in the lower income groups were more likely to give zero bids. Adding across the attributes to create a general measure of willingness to pay, the average percent willingness to pay

Table 10. Household income, preferred spending, and budget range.

Household Income	Preferred Spending	Budget Range[1]	
	Average (SD)	Average (SD)	Pct. of Budget
Less than $50,000 N=5	$47,000 ($35k)	$23,000 ($18k)	46%
$50,000 to $100,000 N=27	$99,000 ($47k)	$53,000 ($36k)	53%
Over $100,000 N=11	$101,000 ($51k)	$81,000 ($58k)	79%

1. Budget range was calculated as (maximum planned spending - minimum planned spending).

Table 11. Percent willingness-to-pay by income group

Willingness to Pay for Additional Attributes	Income Groups			
	> $50k n=10	$50k-$100 n=41	>$100k n=15	Total n=61
Avg Pct Bid[1]	5.5%	8.6%	9.2%	8.4%
Avg Number of Zero Bids	3.9	4.0	3.0	3.7

1. Percent willingness-to-pay was averaged across 10 property attributes.

are highest for the top earning group and lowest for the lowest income group (Table 11). This may results from different perceptions of ability to pay extra for any additional feature, regardless of its appeal.

The marketing literature emphasizes the role that experience with a product class has in shaping the decision process. While few people are likely to have previous experience purchasing a seasonal home, renting seasonal homes may provide the decision maker with a base of knowledge about seasonal home areas and attributes. Results showed that age was a major factor in a person's rental experience; the younger home buyers in the sample reported many more rentals over the past 10 years. Rental experience may also be a factor in defining motives and concerns, as an understanding of all that seasonal home ownership involves may be formed through rental experiences. The importance of motives and concerns varies with experience levels (Tables 12 and 13). Motive ratings were collapsed into 2 categories, with extremely and very important forming the "important" group, and somewhat and not important, the "not important" group. The average number of rentals reported by rating groups are consistently different, with the "not important" group almost always being the group with fewer rental experiences. The only exception is importance of investment, where the relationship is reversed. For concern ratings, a similar pattern is observed. Those who rate concerns as more important also tend to be those who have extensive rental experience (Table 12).

Recreation and seasonal home use are related in many ways, and it is likely that recreation preferences influence the criteria for evaluating seasonal homes. To test for this relationship, the frequency of recreation activity types was cross-tabulated with rankings of area and property resources. In Table 14, the recreation activities listed as important in the seasonal home choice are summarized, grouped by the resources or facilities required for the activity. Respondents were also asked to rank order the 3 area and property attributes most

Table 12. Average number of seasonal home rentals, past 10 yrs., by level of concern.

Level of Concern	Average Number of Seasonal Home Rentals (group n)					
	Afford-ability	Main-tenance	Travel Time	Security	Limit Travel	Not Familiar
Major Concern	13 (85)	8 (23)	12 (17)	7 (19)	6 (6)	8 (4)
Minor Concern	12 (25)	14 (38)	12 (31)	13 (40)	10 (36)	5 (19)
Not a Concern	7 (13)	9 (12)	9 (26)	12 (14)	14 (31)	14 (49)

Table 13. Average number of seasonal home rentals, past 10 yrs., by importance of motives.

Importance of Motives	Average Number of Seasonal Home Rentals (group n)				
	Outdoor Rec.	Get Away & Relax	Be with friends, family	Possible retir. home	Invest-ment
Important	12 (62)	12 (70)	13 (44)	15 (45)	10 (34)
Not Important	9 (10)	4 (3)	8 (28)	6 (27)	13 (36)

Note. Motives were rated on a 4-point importance scale of "extremely", "very", "somewhat" and "not" important; these were collapsed into the two categories shown here.

Table 14. Recreation activities important in seasonal home choice, and enjoyed by the family

Recreation Activities	Percent Who Listed Activity	
	Seasonal Home	Family Activity
Water based activities, including boating, fishing, swimming, sunbathing, tubing, waterskiing, canoeing, and other water sports.	92%	84%
Facility specific activities, including golf, downhill skiing, and tennis,	33%	26%
Forest related activities, including hiking, camping, cross country skiing, hunting, and using the woods.	53%	47%
Activities not specific to resources or facilities, including walking, running, bicycling, gardening, picnicking, and traveling.	20%	30%
Social and cultural activities, including visiting restaurants and shopping.	4%	3%
Other activities.	23%	30%

Note. Totals add to more than 100% because respondents could list up to three activities.

important to them in choosing a seasonal home.

Both the recreation preference and resource importance measures are ordinal; the order of the values for each is meaningful, though the distance between them is not. Association between the variables is measured with the gamma statistic. Costner (1965) states that this is the most appropriate measure for association between ordinal measures because it is meaningful in terms of proportional reduction in error; higher absolute values of gamma indicate greater reductions in the error associated with predicting one variable's values based on the others'.

Table 15. Association between recreation and natural resource preferences as measured by gamma.

Recreation Activities Important in Seasonal Home Choice[1]	Resources Important in Seasonal Home Choice[2]		
	Lakes, Streams in area	Water Frontage	View of the Water
Water Based Recreation	.48	.60	-.00
	Forests in the Area	Forested Acreage	View of the Forest
Forest Based Recreation	.55	.46	.00

1. Recreation activities were listed in response to an open ended question and categorized by the resources they depend on. The variable has a range from 0 to 3 activities listed.
2. Respondents were asked to list the three attributes most important to them in order of importance. The variable has a range from 0 to 3.

Table 15 shows that relationships between water based recreation activities and water resources, and between forest based recreation activities and forest resources, are moderate, and positive as expected. No relationship was found between recreation activity preferences and the scenic values of either water or forests.

Conclusions

The survey of seasonal home buyers was designed to use a broad sample of decision makers to characterize the decision process. Characteristics of the individual decision makers and the frames they create in the decision process are expected to vary, and to generate a wide variety of paths to the common end of purchasing a seasonal home. This chapter began with a description of procedures used to survey seasonal home buyers, and ends with a description of decision makers who participated in the study, their decision frames, and the progress they reported on the first questionnaire toward finding a seasonal home. The

next chapter will present the methods and results of analyses which describe (1) change over time in decision processes, and (2) relationships between changes and decision process characteristics.

CHAPTER SIX

TEMPORAL AND DYNAMIC ASPECT OF SEASONAL HOME CHOICE

Based on what was learned from the literature review and protocol interviews, a conceptual model of complex decision making was developed and operationalized in the context of seasonal home choice. A survey instrument was developed from the model. Two groups of potential seasonal home buyers were surveyed, one in July and again in October, the second group in October and again in February. The descriptive results from both longitudinal surveys are described in Chapter Five.

The purpose of this chapter is to describe findings from the surveys that relate to the temporal and dynamic aspects of the seasonal home decision process. Most analyses reported in this chapter are based on data from the 30 respondents who responded to both first and second questionnaires (File A&B 1&2 in Figure 6). When a different data set or configuration is used, this will be clearly noted.

Change Over Time

The proposed model of complex choice is unlike most decision making models in that it predicts a certain amount of change, rather than assuming stability, in the decision process. The general model of complex choice allows for change in the decision frame, search strategies and practices, and evaluation techniques.

The change analyses used here look primarily at individaul level patterns of change, rather than sample averages. The frequency and magnitude of changes, and the variables in which they occur, are analyzed to identify the nature of change and some factors that may be related to change.

Three types of change measures were used in the panel survey; (1) direct questions about change during the three months preceding the first survey, and (2) during the three months preceding the second survey, and (3) repeated measures of attitudes, behaviors or intentions,

where differences between first and second measures can indicate change.

Change in the Decision Frame

There are two reasons to expect change in the decision frame over time; first, frames are developed over time, and change as the decision maker's perception and understanding evolve; and second, changes in the decision maker's situation (e.g., income, employment, marital status) or in the decision environment (e.g., seasonal home availability, land use regulations, tax laws) may lead to changes in the decision frame. The first type of change is endogenous to the process, occurring as a function of the decision making process itself, while the second is exogenous, caused by factors outside the decision process.

Budget changes. Since buying real estate most often involves establishing a price range rather than a single amount, subjects were asked to list minimum, preferred and maximum amounts they planned to spend. The question was repeated in the same form on the second questionnaire, and the matched responses were compared. Out of the 30 subjects in the panel, 7 reported different preferred spending amounts on the second questionnaire (Table 16). Across the three budget change measures, the minimum change was $5,000; the modal change, $10,000. Average and median amounts of minimum, preferred, and maximum planned spending all decreased on the second survey. There were, however, more people reporting increases than decreases, indicating that the increases tended to be smaller amounts (Table 16).

On both forms, subjects could indicate "I don't know" rather than list dollar amounts. Of the 74 subjects responding to the first form, 19 said they didn't know their budget. Seven of those people remained on the panel, and on the second questionnaire, 5 again said they didn't know their budget. Movement toward establishing a budget fits with the concept of decision framing over time, associated with learning about the market and making decisions. However, there were also 3 subjects who had reported a budget on the first form who responded "I don't

Table 16. Budgets and budget change across two surveys

Variable	First Measure n=30		Second Measure n=30	
Budgets	Mean	Median	Mean	Median
Minimum Spending	$71k	$75k	$68k	$77
Preferred Spending	$105k	$105k	$93k	$88k
Maximum Spending	$128k	$125k	$115k	$100k
Range (Max-Min)	$58k	$40k	$51k	$40k
Change Frequency (n=30)	Number of Increases		Number of Decreases	
Change in Minimum	6		1	
Change in Preferred	4		3	
Change in Maximum	5		6	
Change in Range	5		3	

know" on the second. Moving from certainty to uncertainty could indicate a response to some exogenous change.

The spending measures can also be used to compute the range of each person's budget (providing they indicated maximum and minimum amounts on both surveys), and the ranges can be compared across the two measures. Results indicate that the budget range more often increased than decreased (Table 16).

Because the measures used to assess budget change are based on two direct questions about the budget, both of which may be measured with error, observed changes may be due in part to measurement error. As a results, the prevalence of actual changes in budgets may be different than these measures indicate. The first questionnaire included a question about whether the budget had changed over the past three months, and this offers a check on the frequency of budget changes. Thirty-two percent, or 24 of the 74 respondents, indicated that their budget had changed during the three months preceding the first survey. This is comparable to the proportion of the sample for which changes

were observed in minimum (23%), preferred (23%), and maximum (37%) planned spending.

Purchase probability. In order to gauge the decision maker's perceptions of progress toward making a purchase, respondents were asked to indicate how likely they were to make a purchase within the coming 12 months, and within the next 5 years. This question was asked in the same format on both questionnaires. Contrary to the kind of steady movement toward resolution that a normative decision model would suggest, the group as a whole reported lower mean and median purchase probabilities on the second questionnaire. This was true both for 12 month and 5 year measures. As with budget changes, increases were smaller in magnitude than decreases; in addition, there were fewer subjects reporting increases in purchase probability (Table 17). Subjects were not asked about timelines on the second form because so few people had indicated they had a timeline on the first form. However, 38% of the 74 respondents to the first form did indicate a change in their timeline. This apparent inconsistency of reporting that they have no timeline, yet reporting that their timeline had changed, indicates that the concept of a timeline, what it means to a decision maker, and how it is measured need to be reassessed.

Changes in Concerns and Motives

Another measure of a decision maker's progress toward decision resolution that fits within the concept of decision framing is concerns about making the purchase. Concerns arise from a sense that the decision maker's present and future resources may not be adequate for the purchase and ownership of a seasonal home, or from a sense that present and future needs or motives are not well matched to the expected outcomes of a seasonal home purchase. Concerns may motivate the decision maker to continue adjusting the decision frame, and readiness to resolve the process could be related to the level of concern.

The concerns measured on these two surveys show an interesting pattern of change over the 3 month period. Respondents reported their

Table 17. Average purchase probabilities, first and second questionnaires.

Variable	First Measure (n=30)		Second Measure (n=30)	
Purchase Probability	Mean	Median	Mean	Median
Within 12 months	42%	30%	32%	20%
Within 5 years	75%	80%	59%	60%
Changes in Purchase Probability (n=30)	Number of Increases		Number of Decreases	
Within 12 months	7		11	
Within 5 Years	4		13	

level of concern on a 3 point scale, "major concern", "minor concern", and "not a concern". Of the issues they were questioned about, respondents were most concerned about affordability, followed by maintenance, time and expense of traveling to and from the seasonal home, and security. The effect of the seasonal home purchase on other vacation travel, and lack of familiarity with seasonal home areas were not major concerns for most respondents. On the second survey, subjects were asked to report whether each concern had become more important, less important, or stayed the same. Most of the changes reported were in the direction of greater concern; this was especially true of those issues that were rated major concerns on the first questionnaire. The exception was for familiarity with seasonal home areas, which decision makers reported was less important. For all concerns except security, there were more changes reported for each concern than for any of the motives, or area or property desirability ratings.

The pattern of these changes is mapped in Figure 7. For each issue, the 3 point scale on which concerns were initially rated is shown, with "x" indicating the mean rating from the first questionnaire. End points of 0 and 4 have been added. For each reported change, an arrow is drawn starting from that person's first rating and moving one

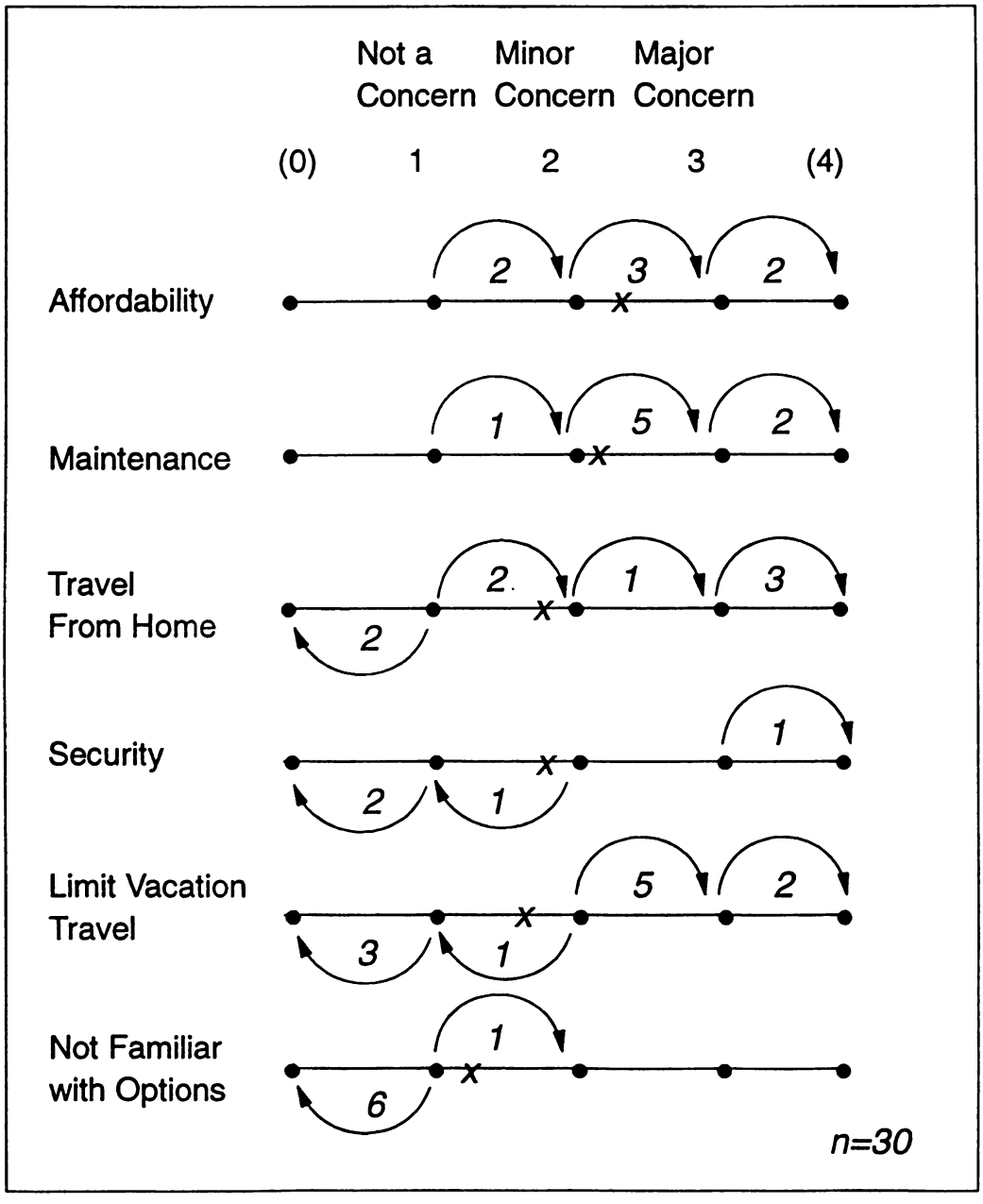

Figure 7. Change in Importance of Concerns

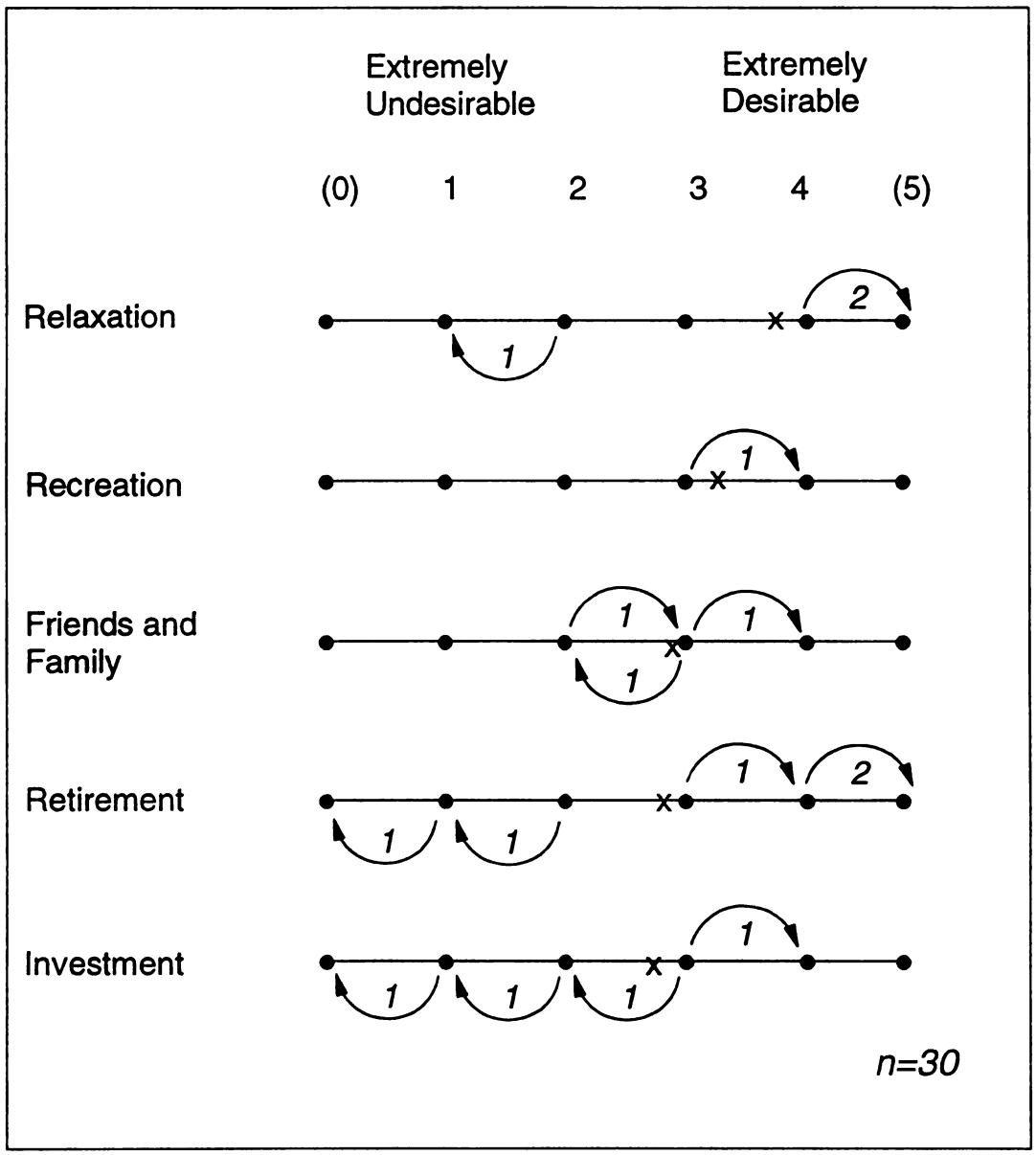

Figure 8. Change in Importance of Motives

point on the scale in the direction indicated. Where more than one case indicated the same change from the same starting point, the number of cases is shown under the arrow. For example, a respondent who rated affordability a major concern, 3, on the first questionnaire, then stated that it had become more important over the past three months, is represented by the arrow arching from 3 to (4), and is one of 5 people who responded in this fashion.

One explanation for concerns becoming more important with the passage of time is that concerns do not prevent purchase, but are a symptom of approaching the final decision; a sort of "pre-purchase regret". It could also be that many people in the sample will resolve the process without buying a seasonal home, which would support the view of concerns as inhibitors.

Motives were less likely to change (Figure 8). The few changes that were reported tended to originate near and move toward either end of the importance scale. Those who gave some motive a high importance rating on the first questionnaire were more likely to indicate increased importance, and those who did not consider it important were more likely to indicate it had become less important.

Changes in Preferences and Criteria

The decision maker's preferences and criteria for judging alternatives are the focus of most decision research because these variables are used to predict choice. Most choice models assume, implicitly or explicitly, that preferences are stable over time. Behavioral decision theory suggest they may not be, due to the influence of learning and adaptation.

Researchers have found that choice models are sensitive to choice set changes (Wedell, 1991). Such changes, termed changes in context, can alter the evaluation of attributes. Since seasonal home choice is characterized by many choice set changes over the course of the decision process, it is reasonable to expect changes in preferences and criteria.

The stability of preferences was tested by asking respondents to

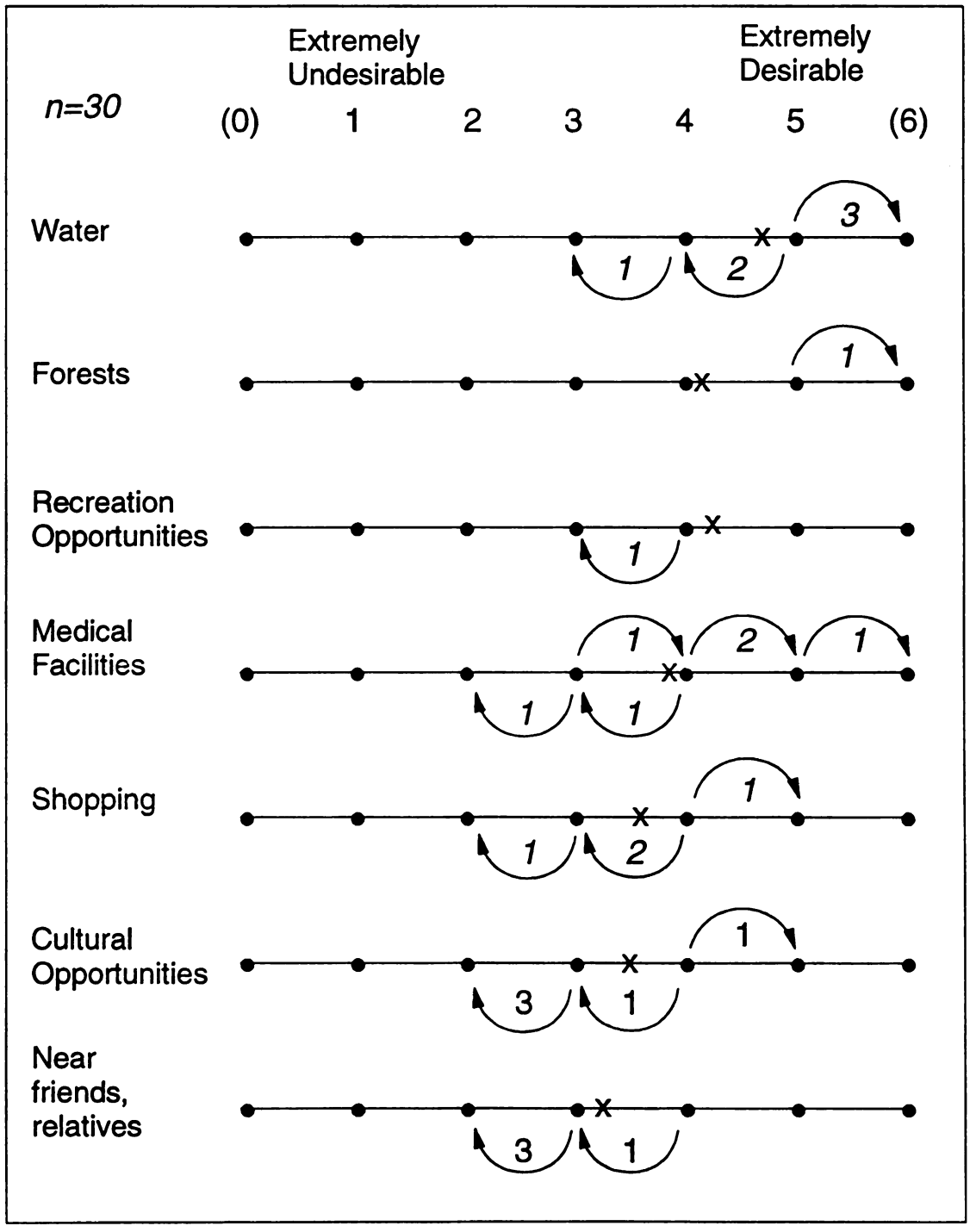

Figure 9. Changes in Area Attribute Desirability

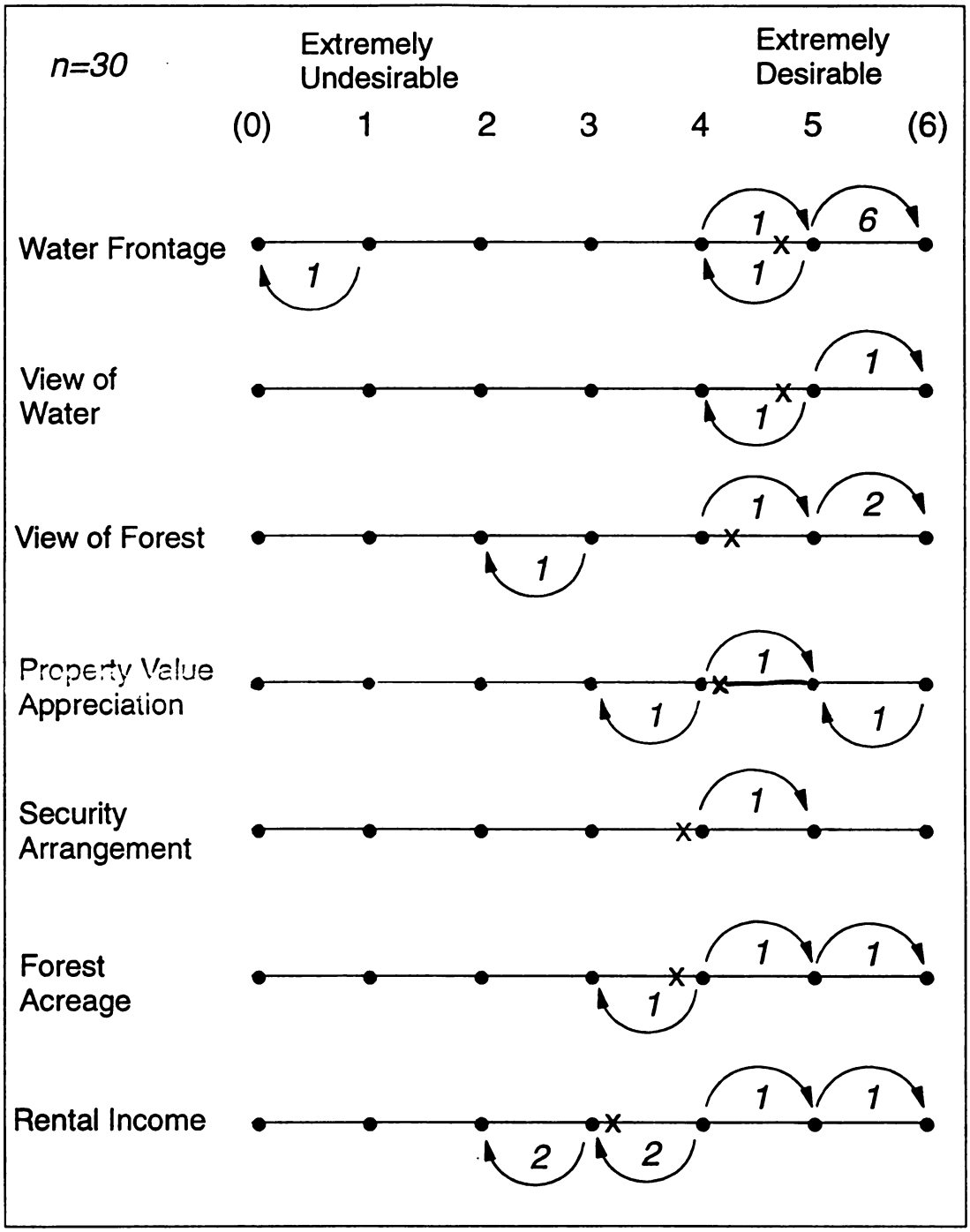

Figure 10. Changes in Property Attribute Desirability

rate whether 7 area attributes and 7 property attributes had become more desirable, less desirable, or remained the same since the first questionnaire. Reported changes are illustrated in Figures 9 and 10, again using the number line format. The attributes are arranged in descending order of desirability ratings from the first survey. Relatively little change was reported in the desirability of area attributes, but somewhat more change was reported in the desirability of the 7 property attributes (Figure 10). A total of 26 changes were reported across the group of 7 area attributes, while 35 were reported for the 7 property features.

Questions about change over the past three months based on the first (n=74) and second (n=30) questionnaire measures provide additional information about the decision process (Table 18). On both first and second survey, preferences for area characteristics were again more stable than preferences for property attributes.

Changes in Search Activities

The remaining measures of change relate to the decision maker's search progress and activities. Many of the measures of change over the past three months (Table 18) indicate changes in the decision maker's choice set. In general, decision makers were more likely to begin considering new areas than to stop considering them. By the time of the second survey, a smaller percentage of the sample reported learning about new areas. Looking at the first questionnaire response from the group of 30 who stayed in the panel, the proportion reporting this change on the first survey was 20%; by the second survey it had dropped to 10%, indicating that search activity, openness to new information, or both were tapering off. Another indication of the group's movement toward resolving the decision are the questions about finalizing plans to buy or deciding not to buy. For the group of 30 panel members, only 20% indicated they were close to resolving the decision by the time of the first survey, compared to nearly half by the time of the second.

Lower levels of search and evaluation activity were also reported

Table 18. Frequency of change over the previous 3 months

Over the past three months I have . . .	First Measure N=74		Second Measure N=30	
	Number	Pct	Number	Pct
Decision Frame				
Changed my mind about how much money to spend on a seasonal home	23	32%	NA	NA
Changed my timeline for purchasing a seasonal home	28	38%	NA	NA
Property Criteria				
Changed my mind about what features are important in a seasonal home	12	16%	5	17%
Changed my mind about what type of seasonal home I prefer to own	NA	NA	6	20%
Changed my mind about what type of neighborhood or setting I prefer	NA	NA	3	10%
Area Criteria				
Changed my mind about what features are important in a seasonal home area	11	15%	1	3%
Begun considering areas further away from home	NA	NA	3	10%
Begun considering areas closer to home	NA	NA	4	13%
Choice Set				
Learned about a new area	16	22%	3	10%
Begun considering an area I had not been interested in	14	19%	5	17%
Stopped considering an area which had been of interest	7	9%	1	3%
Resolution				
Decided not to purchase a seasonal home	12	16%	8	27%
Finalized plans to purchase a seasonal home.	5	7%	4	13%

on the second survey. All respondents reported spending less time engaged in search and evaluation activities. The pattern of information sources use did not appear to change (i.e., respondents generally used the same sources they had been using), but the amount dropped off considerably. Averaging across all 7 information sources to gauge the level of information use shows that the average rating on the second questionnaire of 2, or "sometimes" is lower than the average rating on the first form, 2.5, between "sometimes" and "often". Use did not increase for any of the information sources over the three months between surveys.

The Three Stages of Decision Making

The 3 stage model of decision making, presented in Chapter 3, was also tested using the combined data from the first and second survey. The purpose of developing and testing this model is to establish a basis for predicting when, and after what series of events, decision makers can be expected to complete the decision process. A semi-Markov type model, where transition is predicted in part by duration in a stage (Gottman & Roy, 1990), might be used to define one or more patterns of decision making. Without prior knowledge of the sequence of decision making, the general model of complex choice was used as a basis for measuring progress in decision making, for grouping the measures into 3 stages, and for specifying an expected sequence of events. Decision makers were expected to begin the process by framing their decision, move to search, then to nested search, then to evaluation, and finally to a resolution of some sort (e.g., purchase, delay, or stop considering purchase).

Seven statements were developed to describe these decision making activities, and on both surveys, respondents were asked to indicate which statement best described their current stage in the decision process.

Table 19. Decision making stage

Statement	Group A		Group B		Total	
	Num	Pct	Num	Pct	Num	Pct
I am not yet sure I want to buy, but have begun to look	9	15%	0	0%	9	12%
I am getting to know the market, determining how much to spend, what type to buy	9	15%	4	31%	13	18%
I am familiar with the market and am now gathering information on properties and areas	11	18%	3	23%	14	19%
I have narrowed my search to one area	12	20%	1	8%	13	18%
I have looked enough to identify good options and am deciding among them	6	10%	1	8%	7	10%
I am not currently looking for a seasonal home	13	22%	4	31%	17	23%

Respondents in both groups (A, surveyed in August, and B, surveyed in October) were distributed across the 6 stages listed (Table 10). Most of those who chose "none of these describes me" stated that they were not currently looking for a seasonal home, so this response was coded as a seventh stage.

By comparing responses given by a decision maker at first and second surveys, movement from one type of activity to another can be measured. The seven measures were collapsed into four groups, to form stages one through three plus resolution. The first two statements were intended to represent decision framing, which was treated as Stage One. The third statement was to describe early active search; the fourth,

nesting, which was thought to occur in later active search, and together, these measures would constitute Stage Two. Assuming that the decision maker would contemplate all options, as a rational model would suggest and a compensatory evaluation would require, the third stage was represented by the statement that search had ended and evaluation was the only activity occurring. Two statements measured resolution; "I have purchased . . ." and "I am no longer looking. . .". This arrangement of measures is consistent with the general model of complex choice; defined in this manner, the 3 stages mirror the arrangement of variables in that model.

However, there were problems with this arrangement. First, very few subjects were present in Stage Three. Item 5, which defines it, is described a decision making event, ie., deciding among the options, that is likely to last a very short time. Second, there were 4 subjects who moved from Stage One to resolution, and 7 who resolved after Stage Two, as compared to only 2 who completed the process as expected by moving from Stage Three to the resolution. Finally, there were a number of cases where movement from one measure to another was counter to the direction expected. This was especially true between measures 2 and 3, and between measures 4 and 5. For each of these pairs, the activity described by the two measures is similar. Both 2 and 3 describe activities that occur early in the decision process. Although the two are conceptually different in light of the general model, they may not occur in sequence, nor will the decision maker necessarily pass through both. The same can be said for measures 4 and 5. Though both indicate the process is nearing the end, they are not necessarily sequential, nor are they both necessary to making a decision.

To address these problems, the measures were reassigned to the stages by pairing measures 2 and 3 in stage 2, and 4 and 5 in stage 3. The new arrangement, and the pattern of results, are shown in Figure 11. Using this configuration, the cases are more evenly split between stages 2 and 3, and movement between them, in both directions, is evident.

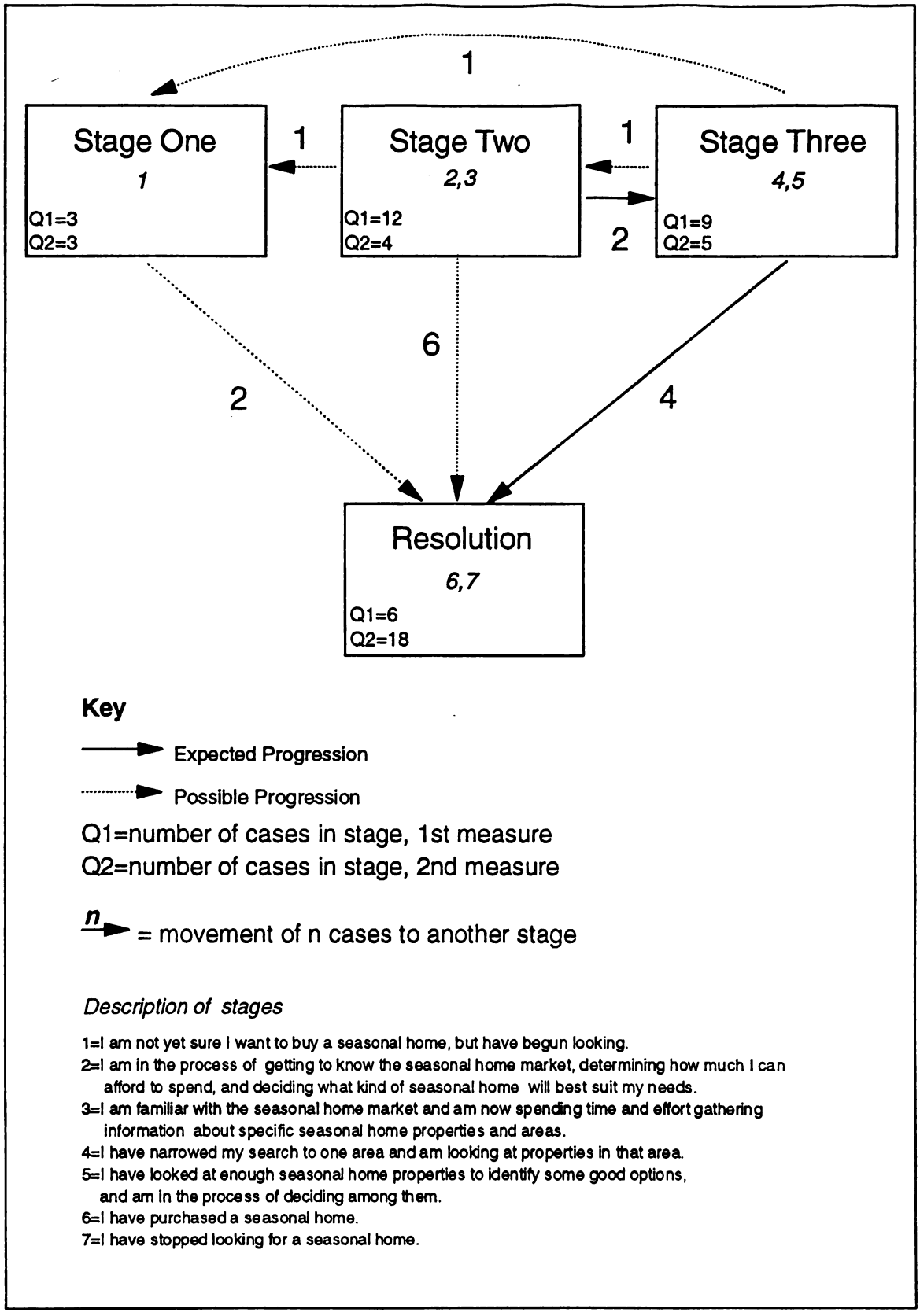

Figure 11. Movement Across the Three Stages of Decision Making

Resolution occurs most frequently after Stage Two or Stage Three. Dividing the measures this way isolates measure 1. This is advantageous for two reasons. First, movement "backwards" to measure 1 implies a different type of change than does movement to measure 2, in that measure 1 states that there is uncertainty about making the purchase. Similarly, movement out of the process before the decision has actually been made to buy a seasonal home is distinct from early resolution after committing to the decision process, and these differences can be observed using the configuration of measures in Figure 11.

Although the number of cases in each stage is somewhat uneven, the proportion that moved out of each stage was very similar, with 2/3, 3/4, and 2/3 moving out of stages one through three, respectively. The number of decision makers who resolve the process after Stage Two is still greater than the number who finish after Stage Three, which runs counter to what the general model of complex choice would suggest. This pattern may be related to the nature of the seasonal home choice set, which is characterized by the sequential availability of alternatives. Because each seasonal home is unique, the choice set is not stable. Any time a home is purchased, that alternative is removed from the choice set until the new owner decides to resell. Selecting an alternative from this type of choice set may require the decision maker to trade off more search, and more certainty about alternatives, for the option to purchase one alternative (Richardson, 1982). Failing to act can mean the permanent loss of an opportunity. This is one explanation for early resolution.

The stages as defined in Figure 11 appear to be a useful start for modeling the temporal dimensions of the decision process. If these stages are meaningful, the other set of measures associated with progress toward resolving the decision, the 12 month and 5 year purchase probabilities, should vary systematically across the stages. Table 19 shows a clear and consistent relationship between stages and probabilities, with those in the earlier stages least likely to resolve

Table 20. Average purchase probability by stage, questionnaires one and two

Purchase Probability	Stage One	Stage Two	Stage Three	Reso-lution	Total
Questionnaire 1	n=3	n=12	n=9	n=6	n=30
Avg. 12 month purchase probability	13%	35%	47%	63%	42%
Avg. 5 year purchase probability	60%	73%	77%	83%	75%
Questionnaire 2	n=3	n=4	n=5	n=18	n=30
Avg. 12 month purchase probability	20%	40%	56%	24%	32%
Avg. 5 year purchase probability	60%	80%	92%	41%	59%

the process soon. Although purchase probabilities were measured on an ordinal scale, the distribution of responses was normal, so the average ratings shown here should roughly co-incide with median measures. The lower mean values for the resolution scale reflect the variety of reasons people were classified as "finished". The resolution stage includes those who have delayed the process, who have bid on a property, purchased a property, or stopped looking. While purchase probability is quite high for some in this group it is quite low for others.

Purchase probabilities were the only measure related to stage. There was no systematic relationship between stage and changes. People across the four stages were equally likely to state that change had occurred. Nor was the pattern of changes different; decision frames, preferences, choice sets, and search strategies showed similar levels and types of change across the stages, though analysis of these relationships was limited by the small sample size.

Summary

The general model of complex choice specifies a decision making process where the decision maker learns, deliberates, evaluates, and decides, implying steady progress toward the goal of owning a seasonal home. However, the model also recognizes that learning about seasonal homes may alter the decision maker's initial preferences, and that change in the decision maker's personal situation and in the decision environment are inevitable, often unpredictable, and potentially disruptive to the decision process.

This chapter has described the changes that were observed over the course of the two period panel survey. Preferences for the attributes of seasonal home areas were more stable than preferences for property attributes. Many changes in concern were recorded, and in nearly all cases, decision makers grew more concerned. Budgets were also changeable, and both preferred spending and budget range decreased, a result of a few major budget decreases outweighing many more small increases. The three stage model of seasonal home decision making was operationalized using measures of progress through the decision process, assessed, and reconfigured.

Chapter 7 brings together the findings from the verbal protocols and the surveys. Both applied and theoretical implications of the findings are discussed. The limitations of the study are discussed, and the chapter ends with recommendations for further research.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to bring together the conceptual models with findings from the empirical research. The chapter is divided into four major sections. The first section contains a summary of the key empirical findings from the verbal protocols and panel survey. The next section discusses the implications of study results for seasonal home marketing, decision research, and tourism and recreation research. The third section explores limitations associated with the design of this study. The chapter ends with recommendations for future research into seasonal home choice, complex choice, and related topics.

Conclusions

Key Findings From The Verbal Protocols

The protocols provided a starting point for the study of seasonal home decision making. These interviews with people who were buying, or had recently bought seasonal homes indicated that the seasonal home decision process has some unique features:

1. **Search and evaluation were preceded by decision framing.** During decision framing, decision makers engaged in search activities unconstrained and unguided by criteria. This exploratory search helped the decision maker learn enough about the decision environment to establish some initial criteria. During this part of the process, the decision maker established a budget, formed expectations about how long the decision process would take, clarified motives for making the purchase, and established some initial criteria, such as distance from home or type of development, that served to limit the choice set and make the search process more manageable.

2. **The decision process lasted a number of years.** Some people reported that they had been considering a seasonal home purchase for 10 years. Much of this time appears to have been spent slowly collecting

information and framing the decision. For most people, the active search process took about 3 years.

3. **Most decision makers used a nested search strategy, where they first decided on a seasonal home area, and then considered specific properties.** Many decision makers in the small sample worked with a real estate agent. The territory each real estate agent covers is limited, which may have made nesting a necessary or very desirable practice.

4. **Changes in decision frames, search activities, choice sets, and evaluation criteria were not uncommon, and occurred for many different reasons.** Personal health, the need or desire to make other major purchases, changing individual or family needs and motives, population growth and development in seasonal home areas; within the sample of only 9 decision makers, each of these factors was mentioned as an important consideration or event that impacted the decision process. Their effects varied from precluding the purchase, to creating indefinite delays, to causing the decision maker to change their evaluation criteria.

Perhaps the most useful outcome of the protocols was the guidance they provided for sifting through the general knowledge and literature about the decision making process and research methods, and extracting those concepts and techniques most relevant to the seasonal home decision process. From the literature and protocols, two conceptual models of complex choice were developed. The first specifies the variables and relationships relevant to a complex decision process. The two sets of antecedent variables provide a conceptual basis for identifying those external forces that shape the decision process. The decision frame is proposed as a mechanism for linking decision environment and decision maker characteristics to the decision making behavior, and for registering and transmitting changes in these antecedent factors to decision making behavior.

The second model, the 3 stages of seasonal home choice, recognizes decision framing as a key element and provides a vehicle for clarifying

the temporal elements of the choice process.

Key Findings From The Surveys

The longitudinal survey was designed on the basis of what was learned from verbal protocols. Although no survey-based decision research was identified in the literature, the nature and duration of the seasonal home decision process, as described in the verbal protocols, seemed to indicate that survey research techniques would be appropriate in this case. The two-period panel design was used to capture the temporal dimensions of the decision process.

The survey data complements the protocols, providing a more detailed picture of how individual characteristics and situations affect the decision process. A non-probability sample was used, so results may or may not describe the population of seasonal home buyers. Using a larger sample of a more diverse group of seasonal home buyers, the survey results confirm some elements of decision making described by the protocol interviews. Key findings include:

1. **The seasonal home buyers sampled were a socially diverse group,** including people from a range of income groups, education levels, family arrangements, areas of permanent residence, and recreation preferences.

2. **Most seasonal home buyers planned to spend approximately one year's income on the seasonal home purchase.** For the highest income group, the seasonal home purchase represented somewhat less than a year's earnings. Income levels were related to the range, flexibility, and stability of planned budgets, with lower income buyers more likely to constrain their budget within narrow and fixed boundaries.

3. **Natural resources such as water and forests were both important and desirable to nearly all seasonal home buyers.** In ratings of seasonal home area features, these features were consistently ranked more desirable and more important than an area's social features, such as proximity to relatives, shopping facilities, medical facilities, or cultural and social activities.

4. Preference changes over time were most likely to occur in the desirability ratings of property attributes. Preferences for features of seasonal home areas were more stable. The decision maker's assessment of when the decision process would be resolved was also subject to change over time.

General Results

A third set of results from this study are supported by both the surveys and the protocols.

1. There was extensive individual variation in decision making. The conceptual model predicts that this will be the case, and both data collection efforts provide support. The model suggests that variations in decision making are due to variations in the decision maker's characteristics, and in their perception of the decision environment, which taken together lead to the formation of a unique decision frame.

The study provides specific examples of this relationship. Decision making units can be individuals, couples, families, or non-family groups, and all four types of decision making units were found in both the protocols and the surveys. Another source of variation related to individual characteristics and perceptions is the diversity of long term plans for using the seasonal home. Some people were making their choice with their own short term interests in mind, some with their children's interests foremost, some with their future retirement in mind, and some were trying to balance more than one of these considerations. These differences in long range plans make the impact of the passage of time and of changes in the environment different. Someone who is interested in having a place for the family to go ski may be less sensitive to the threat of changing land use patterns than someone who intends to use the condominium as a retirement home.

Approaches to search and evaluation were wide ranging, and no underlying pattern or relationship was identified to explain the variations. This supports the concept of constructive choice, where each decision maker, with his/her own unique set of abilities and

perceptions, creates a unique strategy and criteria set in response to the environment.

2. **Choice sets were open-ended and evolved over time.** Awareness of potential seasonal home locations is strongly tied to tourism and to social networks. Decision frames often determined what portion of the awareness set the decision maker attended to.

3. **There were common and identifiable temporal dimensions of the decision process.** The decision process lasted a number of years, and during this time, a common sequence of events was generally observed, where the decision maker first framed the decision, then engaged in search, evaluation, and final decision making or resolution. Decision framing was the longest of the three stages and evaluation the shortest. The sequence and duration of these activities shows how little of a real world decision process is usually captured in the study of decision making; evaluation was short lived and strongly conditioned by many earlier experiences and decisions.

Survey results showed that expectations of when the purchase would be made were very changeable. The protocols suggested that this uncertainty can result from the sequential availability of alternatives, a feature of the seasonal home choice set, or to uncertainty about his or her future situation.

4. **The general model of complex decision making was a useful framework for studying the seasonal home decision process.** The concept of decision framing was especially well supported by both protocols and surveys.

5. **The three stage model of decision making fit both protocol and survey data.** While there was some movement from later to earlier stages, the majority of buyers moved through the stages in the order predicted. Fitting the survey data to the model, and adjusting the model to better fit the data, also provided some insights on how the decision process varies across individuals. This process showed that, while decision making is a long term process for some people, it is quite short for

others. It also suggests that not all decision makers pass through all stages.

Limitations

This study has a number of limitations, some a function of its exploratory nature, and some owing to research design and operationalization. Limitations will be discussed under three categories; (1) sampling, (2) timing, and (3) measurement.

The sample size for the panel survey was a limitation, as it precluded some analyses of relationships between variables. This was especially true for analyzing change using the panel data. Once the 30 subjects were assigned to one of three or four subgroups, there were often only a handful of cases in each group.

The sample was intended to be much larger, but unforseen problems arose. First, real estate agents were difficult to recruit for the study. Very few were enthusiastic about the research, though they often acknowledged that the information it could provide would be useful to them. Second, among those agents who were involved in the study, there were several who did not follow through, either failing to distribute the questionnaires, or not sending the list of client names and addresses as they had promised. Third, it appeared that some agents gave us lists that were out of date. Several pieces of mail were returned with "forwarding order expired" stamped on them. Other questionnaires were returned with messages such as "I am not and never was looking for a seasonal home!". The lists of some agents generated very high response rates and no undeliverable mail, which supports the idea that some non-response was due to sampling from inaccurate or out of date lists. Old lists also contributed to refusal of the second questionnaire, as many who dropped off the panel did so because they had completed the decision process.

The sampling might have worked better if more time had been spent in the field, talking with real estate agents and asking them to review the mailing list and strike out names of those who had not been in

contact with them for more than a year.

The second limitation of the study relates to the timing of the panel study. The second group surveyed should have been much larger, but most real estate agents did not have or would not share a second list of clients to be surveyed in October and February. Because so few were sampled at these times, it was not possible to conduct an analysis of seasonality in the decision process. The ideal configuration of data for such an analysis would be panel studies initiated at 3 different times, so that the third study sampled home buyers in February and again in early May. Another problem with the timing of the study was that, for some purposes such as tracing movement through the stages, three months was too long an interval. Using a shorter interval might have provided a better picture of movement from one stage to another. If used together with a longer interval panel study, it might also be possible to test for recall effects over different intervals.

The third set of limitations related to the measures used on the questionnaires. Measures for the two questionnaires were nearly all constructed specifically for this study. Very little was known in advance about how well they would work, so perhaps it is not surprising that some were very successful and others not useful at all. For example, the measurement of timelines proved problematic. In many of the protocol interviews, people talked about when they were planning to finish the decision process, yet on the questionnaires, most people said they did not have a timeline. Purchase probabilities and reported changes in the timeline indicated that, in fact, they did have something like the concept of a timeline. What they call that something and how it might be measured are issues for further study.

Another measurement problem is sorting out the error in measurement from change over time. Without data about the reliability of each measure, there was no way to estimate which portion of a "change" from time 1 to time 2 was measurement error, and which part measured a difference in attitudes or intentions.

The final limitation of the measures used in this study is that they did not always appear to be measured at an appropriate level of generality/specificity. For example, results from the statements about approaches to decision making were disappointing. There was little variation on individual items, and no observable pattern across items, despite an attempt to represent different types of search strategies, evaluation rules, and general decision making styles in these measures. It appears that although such details may be observable in a laboratory setting, they are not easy for the decision maker to report in the context of real world decision making. This problem is a direct consequence of borrowing measurement concepts from decision research, where nearly all studies are short term and simple, lending themselves to detailed investigations of cognitions and cognitive mechanisms. While it should be possible to learn something about the cognitive processes of decision making in a study of long term, complex decision making, the type of detail usually obtained in short term studies probably should not be expected here.

Implications

This study has implications both for the study of decision making, and for complex decision making in the context of tourism and recreation.

First, it has shown that the complex decision process associated with purchasing a seasonal home is a combination of 3 subprocesses; decision framing, search, and evaluation. Decision making is most often studied in a context where one or more of these subprocesses is excluded by the researcher. When research begins by telling a person to make a choice from among a set of alternatives, the decision framing process is excluded. The search process may be excluded or strictly limited by providing the decision maker with set descriptions of the alternatives. Evaluation is usually the focus of decision research, but past research has recognized that there may be cases where evaluation is not, in fact, part of the choice process, such as when the decision is made from

habit.

The advantage to studying decision making in a controlled environment and focusing on only one subprocess is that more detailed knowledge of a specific subprocess can be obtained, and in the case of evaluation, these results might have good predictive power. Decision research, however, has ignored issues of how the decision process works to such an extent that the practical value of each additional research effort is mostly in its predictions for a particular application. Stepping back from the details of the evaluation process to fit together a larger picture of the decision process is bound to result in new insights.

The importance of decision framing in complex choice, together with the prevalence of complex decisions related to recreation and tourism, has implications for conducting decision research in these fields. Understanding how people frame such decisions would allow researchers to present subjects with choices that utilize frames like their own, improving the validity of decision experiments. The extent of individual variation in decision making, which appears to be amplified by decision complexity and duration, makes reliance on a single choice model problematic. Because of their proposed link to decision behavior, decision frames could be a useful tool for segmenting decision makers into groups, allowing distinct structural models to be developed for each.

The study also has implications for marketing tourism and recreation. Marketing complex goods might be improved through attention to the unique nature of complex choice. The concept of relationship marketing and its emphasis on maintaining contact with the customer and understanding and adapting to their needs and wants has special relevance for complex choice (Levitt, 1983; Mahoney & Warnell, nd.). Providing information, assistance, personal contacts and other services which are tailored to the decision maker's stage in the choice process could help both the customer and the vendor. For example, during

decision framing, the buyer needs information about the class of goods or alternatives in general, and about expedient methods of searching alternatives. During search and evaluation, the buyer will be most open to receiving specific information about a given alternative. Once the buyer reaches the evaluation stage, maintaining contact becomes essential in order to identify and capitalize on the buyer's readiness to resolve the decision process.

RECOMMENDATIONS

This study was intended as a starting point for research on long term, complex choice. The exploratory nature of the study, which limits the study in many ways, also makes it a rich source for ideas for future research. Recommendations for continuing this line of research include:

1. **More research is needed to understand complex decision making over time.** Additional field studies seem most appropriate for finding out how the entire decision process unfolds, how decision makers respond to change in the decision environment, what conditions must be met before the decision maker decides to make a purchase, how decision makers assess their likelihood of purchase, and what events or decision lead them to delay or abandon the decision process.

This study has shown that there are many more dimensions to decision making than are typically addressed in decision research. While short term decisions make a convenient vehicle for studying evaluation, long term decisions provide an equally good vehicle for understanding the temporal dimensions of decision making, the role of framing in the decision process, and the coping or adaptation techniques decision makers employ when their decision environment changes. It is possible that these elements of long term choice have relevance to short term decision making as well.

2. **Additional research could clarify the nature and role of decision framing.** Unlike search and evaluation, which have been the focus of most choice research, decision framing has received little attention since being proposed by Newell, Shaw and Simon (1958) and extended by

Newell and Simon (1972). It may be possible to study the decision framing process in more detail in a laboratory setting. Subjects could be given a decision making scenario and asked to describe how they would approach the situation. In addition to clarifying the role of decision framing in the decision process, further research on framing may help decision researchers understand variations in information use, search and evaluation behavior, as well as differences between novice and experienced decision makers.

3. **Additional work should be done to refine the three stage model of the temporal aspects of decision making, or to develop alternative models of the temporal dimensions of decision making.** Based on results of the study, it appears to be possible to capture the sequence of events using a Markov or semi-Markov model, where movement from one stage to another is predicted as a function of time and other variables (Markus, 1979).

4. **More research is needed on the link between tourism, seasonal home ownership, and retirement.** This study showed how the decision maker's awareness of potential seasonal home locations was influenced by tourism activity. The expected benefits or values associated with tourism and seasonal home ownership are similar, as are those between seasonal home ownership and retirement. Tourism, seasonal home ownership, and retirement seem to form a continuum of knowledge about, involvement in, and commitment to a community. From the consumer's standpoint, there is both efficiency and comfort associated with linking the three in sequence; trips to an area for vacation can also serve to familiarize the visitor with seasonal home options, and use of the seasonal home can allow the pre-retiree to begin establishing a social network in their future retirement community.

By applying existing decision research to the complex process of choosing a seasonal home, this study has suggested ways in which simple and complex consumer purchases differ. This dissertation has laid initial groundwork for the study of complex choice by extending choice

models to cover dynamic and lengthier choice processes. The seasonal home decision study provides support for a broader model of complex decision making, and suggest several directions for future research into complex choice. Further study of these kinds of choices should also provide a better understanding of more traditional choice processes, if only to suggest some of their limitations.

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APPENDIX A.

MATERIALS SENT TO REAL ESTATE AGENCIES

MICHIGAN STATE UNIVERSITY

DEPARTMENT OF PARK AND RECREATION RESOURCES
NATURAL RESOURCES BUILDING
(517) 353-5190

EAST LANSING • MICHIGAN • 48824-1222

April 24, 1992

Dear Realtor,

We are writing to you to ask for your help in identifying prospective seasonal home buyers for a research project we are conducting. **This project will examine how buyers choose a seasonal home location.** It is being jointly funded by Michigan State University and the United States Forest Service. The study will address many issues we think you will find interesting, and will provide you with some useful insights into seasonal home buying behavior.

Here are some of the questions we'll be addressing:

1. How does a potential buyer choose a realtor? At what stage in the search process does the buyer contact a realtor?

2. How does a potential buyer decide which area or community to locate in? What factors might lead the buyer to consider a different community?

3. What motivates a person to buy a seasonal home? Do these motives change over time?

4. What characteristics of the area does the buyer consider most important when he or she starts looking for a seasonal home? Does this change as the search progresses?

5. What makes a person decide not to buy a seasonal home, or to delay his or her purchase?

As you can see, the information we collect will be valuable for real estate agents, especially those like you who list and sell many seasonal properties.

How Can You Help?

To get accurate, reliable information about the buyers' behavior, we need to question people while they are in the process of searching for seasonal homes. That's where you come in. We are asking a sample of real estate offices in northern Michigan to help us identify people who are in the market for a seasonal home. We hope to work with 25 to 50 real estate agencies in order to sample about 400 prospective seasonal home buyers who could participate in this study on a voluntary and confidential basis.

We would only need from 5-20 client names from your office, depending on the volume of clients you may have looking for seasonal homes. Each client you identify would receive a 5 page questionnaire in June and another in September or October. The questionnaires will measure background information, recreation interests, reasons for buying a seasonal home, desired characteristics of the community or area, and characteristics of their search and decision processes. Clients will be surveyed twice in order to measure progress in their decision process, and changes in perceptions, motivations, search effort and strategies over a 4 month period.

A cover letter will be included with the first questionnaire to explain the purpose of the study, the agencies funding the study, how the client was chosen to participate, and **assurances that their participation will be on a confidential basis. They will also be assured that their participation is voluntary.**

If you choose to help with the study, we can provide three options for identifying clients:

OPTION 1. You can provide names and addresses of a small sample of your clients and we would handle all mailings. We would want only those clients who are looking for a seasonal residence, either for use as a vacation home, or as a *seasonal* retirement residence (e.g., winters in Florida, summers in Michigan). If you wish, you could contact the clients in advance to obtain their permission to release names and addresses and be part of our study. **With or without their initial consent, their participation is voluntary.** We will use the mailing list *only* for the purpose of sending the client these two questionnaires. **When our study is complete, the mailing list will be destroyed. Under no circumstances will any other person or organization have access to this list.** We will comply fully with the Michigan State University's requirement that the subject's identity be completely confidential, known only to the research team. No record of the clients' names will be kept.

OPTION 2. You could mail the surveys directly from your office to your clients. We would provide stamped envelopes containing the cover letter, questionnaire, and stamped return envelope. You could add your own cover letter or note, if you wish. Then you would affix the mailing labels and mail the envelopes. The procedure would be repeated in September or October *using the same list of clients.*

OPTION 3. You could distribute the first questionnaire in person to a small sample of new clients contacting or visiting your office during June. Names and addresses would be recorded for either you or us to mail the follow-up questionnaire in September or October.

We hope that one of the options outlined above provides you with an acceptable means of helping us contact your clients. Your participation is very important to the success of the study.

The agencies that assist in this project will receive an executive summary of the study, focusing on results that help you understand seasonal home buyers across northern Michigan.

Please return the enclosed postcard. Be sure to indicate which of the options you prefer. We will call you to arrange the details of your participation. It would be helpful if you could designate a contact person, and tell us when the best time is to call. If you are unsure about participating, check the "maybe" box. We will be happy to call you and answer any questions you might have.

We look forward to working with you.

Sincerely,

Susan Irish Stewart
Graduate Research Assistant

Daniel J. Stynes
Professor

June 18, 1992

Dear Realtors,

Thank you for agreeing to assist with the Survey of Seasonal Home Buyers. Enclosed are the questionnaires for you to mail and/or pass out from your office. I have included one extra envelope marked "SAMPLE" for you to inspect. It contains a cover letter, questionnaire, and business reply envelope. The mailing envelope and questionnaire are both numbered and the numbers match. Please note that both the cover letter and questionnaire instructions (on the front cover) insure your client that their participation is voluntary and that their responses will be kept confidential. Note also that on the back page of the questionnaire, your clients have the option of removing their name from our list for the second questionnaire mailing in October.

As I mentioned when I contacted you, there are a few things I need you to do to insure that our second survey in October goes to the same group of potential seasonal home buyers.

A record keeping sheet (or sheets) is enclosed for your convenience. For each questionnaire that is mailed or passed out, record the CLIENT'S NAME and the NUMBER FROM THE ENVELOPE in the column provided. If you have unused questionnaires at the end of the sampling period, record their numbers on the record keeping sheet as well. Unused questionnaires do not need to be returned.

It is VERY IMPORTANT to our research that you help us keep track of who these questionnaires are sent to. We will be sending a second questionnaire in October, and we need to be able to match the June and October responses to determine how each client has progressed in their seasonal home search process. If your client checks the box on the back page of the questionnaire indicating that they do not wish to receive a second questionnaire, we will match their questionnaire number and name in order to remove them from the second mailing list. For these reasons, it is essential that you keep an accurate and complete record.

If you will be mailing surveys from your office, you have received pre-stamped envelopes which contain the cover letter, questionnaire, and return envelope. Those who will be passing out surveys have received the unstamped envelopes with the same contents. The envelopes are not sealed, so that you may insert your business card if you wish. PLEASE MAIL ALL SURVEYS BY JULY 1. PLEASE PASS OUT SURVEYS ONLY BETWEEN JUNE 25 AND JULY 6.

Some agencies are receiving both stamped and unstamped envelopes. If you find that you do not have enough stamped envelopes, put the proper postage on the unstamped envelopes and keep track of how much postage you use. I will be happy to reimburse you.

Again, thank you very much for your help with this study. I appreciate your willingness to donate your time. If you have questions or problems, you may call me at (517) 353-5190 during working hours.

Sincerely,

Susan Stewart
Research Project Coordinator

You agreed to mail questionnaires. Here are the procedures we would like you to follow:

1. Read the cover letter and review the questionnaire. Note that both the cover letter and questionnaire instructions (on the front cover) insure your client that their participation is voluntary and that their responses will be kept confidential.

2. Assemble the mailing list. If you have a very large seasonal home client list to draw names and addresses from, choose them alphabetically or randomly. Please do NOT pick out your "best" or "most likely" seasonal home buyers. This will bias our study. However, it would be helpful to limit the list to those clients for whom you have *current* addresses.

3. Address and seal the envelopes. The envelopes are not sealed, so that you may insert your business card if you wish. DO NOT include other promotional materials, as this may add too much weight for the .29 first class stamp. It could also interfere with our ability to obtain valid responses.

4. RECORD THE CLIENT'S NAME, THE ENVELOPE NUMBER, AND THE DATE ON THE RECORD KEEPING SHEET. It is VERY IMPORTANT to our research that you help us keep track of who each questionnaire is sent to by envelope number. The questionnaires we sent you are a consecutively numbered set. The envelopes for each agent are also numbered consecutively. If you distribute them in consecutive order it will make your record keeping simpler.

5. Mail the envelopes on or before July 1, 1992. Because the questionnaires have questions about activities over the past three months, we would like all questionnaires to go out at about the same time.

6. Send us a copy of the record keeping sheet. A business reply envelope marked "RECORDS" is included for this purpose. If you do not wish to disclose the names of your clients to us, simply fold the names and addresses column under before you copy the record sheet. We do not need to know the names and addresses, but it is essential that you keep this information.

7. File your record keeping sheet. We will contact you in September to arrange for the October phase of the study. Using the record keeping sheets, we will match the June and October responses to determine how each client has progressed in their seasonal home search process. If your client checks the box on the back page of the questionnaire indicating that they do not wish to receive a second questionnaire, we will match their questionnaire number and name in order to remove them from the second mailing list. For these reasons, it is essential that you keep an accurate and complete record.

You have agreed to pass out questionnaires. Here are the distribution procedures we would like you to follow:

1. Read the cover letter and review the questionnaire. Note that both the cover letter and questionnaire instructions (on the front cover) insure your client that their participation is voluntary and that their responses will be kept confidential.

2. Distribute the large envelopes to your agents. Each of these envelopes has several letter sized, numbered envelopes in it, each containing a cover letter, questionnaire, and business reply envelope. attached.

3. Each agent distributes questionnaires to your potential seasonal home buyers. The survey should go to any client who is looking for a seasonal vacation or retirement home. Discuss distribution procedures with all participating agents. DO NOT distribute questionnaires on the basis of which clients are your "best" or "most likely" seasonal home buyers, as this will bias our study.

4. RECORD THE CLIENTS NAME AND ADDRESS, THE ENVELOPE NUMBER, AND THE DATE OF DISTRIBUTION ON THE RECORD KEEPING SHEET. Please review record keeping procedures with each agent, to insure that good records are kept. Each agent's envelope has a record keeping sheet attached. It is VERY IMPORTANT to our research that you help us keep track of who each questionnaire is sent to by envelope number. The questionnaires we sent you are a consecutively numbered set. The envelopes for each agent are also numbered consecutively. If you distribute them in consecutive order it will make your record keeping simpler.

5. STOP distributing questionnaires on July 6, 1992. If you have unused questionnaires at the end of the sampling period, record their numbers on the record keeping sheet as well. Please keep any unused questionnaires. Depending on how many questionnaires were distributed in your area during the sampling period, we may contact you and ask that you distribute more.

6. Send us a copy of the record keeping sheet. A business reply envelope marked "RECORDS" is included for this purpose. If you do not wish to disclose the names of your clients to us, simply fold the names and addresses column under before you copy the record sheet. We do not need to know the names and addresses, but it is essential that you keep this information.

7. File your record keeping sheet. We will contact you in September to arrange for the October phase of the study. Using the record keeping sheets, we will match the June and October responses to determine how each client has progressed in their seasonal home search process. If your client checks the box on the back page of the questionnaire indicating that they do not wish to receive a second questionnaire, we will match their questionnaire number and name in order to remove them from the second mailing list. For these reasons, it is essential that you keep an accurate and complete record.

APPENDIX B.

FIRST PHASE QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY

DEPARTMENT OF PARK AND RECREATION RESOURCES
NATURAL RESOURCES BUILDING
(517) 353-5190

EAST LANSING • MICHIGAN • 48824-1222

June 17, 1992

Dear Seasonal Home Buyer,

Michigan State University, in cooperation with the United States Forest Service, is conducting a study to better understand how people identify and evaluate seasonal home areas and properties. You were identified by a Michigan real estate firm as someone interested in a seasonal or retirement home. If you are now or have recently been interested in purchasing a seasonal or retirement home, we would like to ask you to spend about 10 minutes to complete the enclosed questionnaire. If you have no interest in a seasonal home or do not wish to participate, simply return the questionnaire to us in the enclosed business reply envelope.

The questions explore what factors you consider to be important in choosing a seasonal home and how you have gone about identifying and evaluating alternative seasonal home areas and properties. Should you agree to participate in the study, be assured that all of your answers will be treated as strictly confidential. Your responses will be combined with those of others to identify general patterns in the population. No answers will be directly associated with any particular individual. As your response is important to obtaining a representative sample of viewpoints, we would like to encourage you to complete the questionnaire. Completing the questionnaire should also be useful to you, as it should help you to better understand your own preferences and decision process for considering or buying a seasonal home.

Your responses are important to us whether you are just starting to think about a seasonal home, have completed a purchase, or have dropped out of the market. The study results will appear as part of a doctoral dissertation at Michigan State University. Results will also be distributed in summary form to the U.S. Forest Service and real estate firms that have helped in identifying names and addresses. Be assured that real estate firms will NOT see any of the completed questionnaires or in any way be able to identify any responses with your name. This survey is in no way associated with any solicitation or sales of seasonal homes. We will not provide your name and address to anyone else or in any way permit your participation in this study to be used for any commercial purpose.

For many people a seasonal home purchase is a complex process that may take place over a long period of time. In order to study this process, we would like to send you a similar questionnaire in about three months to trace your progress in finding a seasonal home. If you do not wish to participate in the final phase of the survey, please check the box at the end of the questionnaire and we will remove your name from our survey panel.

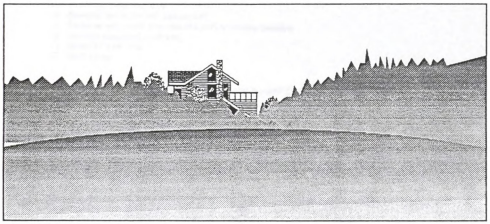
Thank you very much for your help with this study. If you have any questions about the study, you may call me at (517) 353-5190 during working hours. If you would like to receive a summary of the study results (in about 6 months), write the word "SUMMARY" on the cover of the questionnaire.

Sincerely,

Susan I. Stewart

Susan I. Stewart
Research Project Coordinator

Survey of Seasonal Home Buyers



The purpose of this study is to better understand how people identify and evaluate seasonal home areas and properties. You were selected as someone who is interested in purchasing a seasonal or retirement home.

It should take about 10 minutes to complete the questionnaire. Your responses are important to us whether you are just starting to think about a seasonal home, have completed a purchase, or have dropped out of the market. We also hope the questions help you to better understand your own seasonal home location preferences and decision processes.

When you have completed the questionnaire simply return it in the enclosed postage paid envelope. All of your responses will be treated as strictly confidential. Thank you for your participation.

Michigan State University

Department of Park and Recreation Resources
East Lansing, MI 48824-1222

Survey of Seasonal Home Buyers

1. What type of seasonal home would you prefer to own? *(please check one.)*

   ☐ Single family home ☐ Cabin
   ☐ Condominium ☐ Don't know
   ☐ Apartment

2. What type of neighborhood or setting do you prefer for a seasonal home? *(please check one.)*

   ☐ Residential neighborhood
   ☐ Seasonal home owners' association
   ☐ Resort development (includes ski, golf, or marina facilities)
   ☐ Sparsely populated rural area
   ☐ Secluded rural area
   ☐ Don't know

3. Do you have friends or relatives who own seasonal homes? *(please check one)*

   ☐ Yes, friends
   ☐ Yes, relatives
   ☐ Yes, friends and relatives
   ☐ No

4. Over the past 10 years, how many times have you rented a seasonal home or condominium for a weekend or vacation trip? *(include any times you used a friend or relative's home or condominium)* _____ *times.*

5. How important to you are each of the following reasons for purchasing a seasonal home? *(please circle one response for each statement.)*

	Extremely Important	Very Important	Somewhat Important	Not Important
A place for outdoor recreation	1	2	3	4
A place to get away & relax	1	2	3	4
A place to be with friends & family	1	2	3	4
A possible retirement home or area	1	2	3	4
An investment	1	2	3	4
Other *(specify)*_____	1	2	3	4

6. Listed below are some concerns that might lead a person to decide NOT to buy a seasonal home. How important are each of these concerns to you? *(please check one box after each concern listed.)*

	MAJOR CONCERN	MINOR CONCERN	NOT A CONCERN
Not sure I/we can afford it	☐	☐	☐
Time or expense of maintenance	☐	☐	☐
Time or expense of travelling back and forth from home	☐	☐	☐
Concerns about security and vandalism	☐	☐	☐
Might limit travel to other vacation areas	☐	☐	☐
Not familiar enough with seasonal home areas	☐	☐	☐

7. When did you. . .	More than 5 years ago	Within the last 5 years	Within the last 12 months	Within the last 3 months	Not Yet
First consider purchasing a seasonal home?	☐	☐	☐	☐	☐
Begin reading real estate listings?	☐	☐	☐	☐	☐
Begin driving around seasonal home areas?	☐	☐	☐	☐	☐
Contact a realtor?	☐	☐	☐	☐	☐

8. Have you established a date or deadline for purchasing a seasonal home? *(please check one.)*

   ☐ YES, firm deadline of _____(month)_____(year).

   ☐ YES, flexible deadline of around _____(month)_____(year).

   ☐ NO, do not have a deadline for buying a seasonal home.

		For Sure	Likely		Not Likely		No Chance
9.a.	How likely are you to buy a seasonal home within the next 12 months? *(please circle one.)*	100%	80%	60%	40%	20%	0%
9.b.	How likely are you to buy a seasonal home within the next **five years?** *(please circle one.)*	100%	80%	60%	40%	20%	0%

10. How much money do you plan to spend on a seasonal home in the event that you buy one? *(please indicate your minimum, preferred, and maximum purchase amounts (in dollars) on the lines below.)*

	Minimum	Preferred	Maximum	Don't Know
(dollars)	_____	_____	_____	☐

11. How far would you like your seasonal home to be from your permanent home? *(Please indicate your minimum, preferred, and maximum distances (in miles) on the lines below.)*

	Minimum	Preferred	Maximum	Don't Know
(miles)	_____	_____	_____	☐

12. Which three outdoor recreation activities are most important to you when you consider a seasonal home area? *(please list three activities.)*

(1) _____ (2) _____ (3) _____

In the next four questions, we would like you to think about the factors that are most important to you when looking for or evaluating seasonal home areas and properties. By seasonal home AREA we mean the community or county in which a seasonal home is located. By seasonal home PROPERTY we mean the seasonal home itself and the lot it sits on.

13. Of the factors listed below, rank the three which are most important to you in choosing a seasonal home AREA: (1 = MOST IMPORTANT; 2 = SECOND MOST IMPORTANT; 3 = THIRD MOST IMPORTANT.)

__ Water (lakes and streams)
__ Forests
__ Climate
__ Distance from permanent home
__ Recreation opportunities
__ Near friends or relatives
__ Community services and facilities
__ Not too crowded
__ Cultural and social activities
__ Local taxes

14. Of the factors listed below, rank the three which are most important to you in choosing a particular seasonal home **PROPERTY**: (1 = MOST IMPORTANT; 2 = SECOND MOST IMPORTANT; 3 = THIRD MOST IMPORTANT)

__ Water frontage
__ Forest acreage
__ View of water
__ View of forest
__ Privacy
__ Maintenance cost
__ Rental income
__ Property value appreciation
__ Friendly neighbors
__ Security

15. How desirable to you are the following characteristics in a seasonal home **AREA**? ***(Please circle one response for each characteristic.)***

	Extremely Desirable	Desirable	Neutral	Undesirable	Extremely Undesirable	Have not Considered
Water (lakes or streams)	1	2	3	4	5	☐
Forests	1	2	3	4	5	☐
Recreation opportunities	1	2	3	4	5	☐
Shopping areas	1	2	3	4	5	☐
Medical facilities	1	2	3	4	5	☐
Cultural & social activities	1	2	3	4	5	☐
Near friends or relatives	1	2	3	4	5	☐

16. How desirable to you are the following characteristics in a particular seasonal home **PROPERTY**? ***(Please circle one response for each characteristic.)***

	Extremely Desirable	Desirable	Neutral	Undesirable	Extremely Undesirable	Have not Considered
Rental income	1	2	3	4	5	☐
Property appreciation	1	2	3	4	5	☐
Security arrangement	1	2	3	4	5	☐
View of water	1	2	3	4	5	☐
View of forest	1	2	3	4	5	☐
Forested acreage	1	2	3	4	5	☐
Water frontage	1	2	3	4	5	☐

17. Which communities or counties **in Michigan or other states** have you considered as possible seasonal home areas? List up to six areas you have seriously considered so far. For each area, indicate the nearby community or county and state. Then indicate how you FIRST found out about that area as a potential seasonal home location. ***(Please check ONE initial source for each area you list).***

COMMUNITY/COUNTY	STATE	Formerly Lived There	Friends/ Relatives Live There	Read About It	Realtor Told Me	Vacationed There
1. _____	_____	☐	☐	☐	☐	☐
2. _____	_____	☐	☐	☐	☐	☐
3. _____	_____	☐	☐	☐	☐	☐
4. _____	_____	☐	☐	☐	☐	☐
5. _____	_____	☐	☐	☐	☐	☐
6. _____	_____	☐	☐	☐	☐	☐

How many other locations have you seriously considered? _____

18. Suppose you identified a seasonal home or lot that had most of the features you desired at a price you were willing to pay, but did not have one of the features listed below. What percentage increase in the price would you be willing to pay to have this additional feature? ***Write zero if you are not willing to pay for this feature. (For example, writing 10% would mean you would pay an extra $5,000 on a $50,000 property).***

___%	Great Lakes waterfront	___%	40 acres of forest land
___%	Inland lake waterfront	___%	Outstanding water views
___%	River frontage	___%	Outstanding forest views
___%	An hour closer to home	___%	Complete privacy
___%	Security arrangement	___%	Adjoining trails through public land

19. Which of the following best describes the current stage of your search for a seasonal home? ***(please check one.)***

- ☐ I am not yet sure I want to buy a seasonal home, but I have begun looking.
- ☐ I am in the process of getting to know the seasonal home market, determining how much I can afford to spend, and deciding what kind of seasonal home will best suit my needs.
- ☐ I am familiar with the seasonal home market and am now spending time and effort gathering information about specific seasonal home properties and areas.
- ☐ I have narrowed my search to a single area and am looking at properties in that area.
- ☐ I have looked at enough seasonal home properties to identify some good options, and am in the process of deciding among them.
- ☐ None of these describe me because *(please specify)*_____

_____

20. The following statements describe different approaches to finding a seasonal home. Please indicate how well each statement describes your approach by indicating the extent to which you agree or disagree with the statement. *(please circle one response for each statement.)*

Statements:	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
I combine looking for a seasonal home with vacation trips	1	2	3	4	5
I rely on realtors to identify suitable properties	1	2	3	4	5
There are very specific features I am looking for in a seasonal home	1	2	3	4	5
I like to look at a number of properties before making an evaluation	1	2	3	4	5
I gather the same kind of information about each property so I can compare them	1	2	3	4	5
I only investigate properties that meet my criteria	1	2	3	4	5
I keep a file of literature about seasonal home areas or properties (real estate listings, promotional brochures, maps, pictures)	1	2	3	4	5
I am a careful decision maker	1	2	3	4	5
A single factor often determines whether a property is acceptable to me or not	1	2	3	4	5
I keep written records of properties I have considered or looked at	1	2	3	4	5
I consider seasonal homes in one area at a time	1	2	3	4	5
Immediately after looking at each property, I evaluate it and decide whether or not it is worth seriously considering	1	2	3	4	5
I get impatient with long decision processes	1	2	3	4	5
I am not willing to look at individual properties until I decide that the area is acceptable	1	2	3	4	5
When I am ready to make a final decision, I will review all of the properties I have considered	1	2	3	4	5

The next four questions ask about your seasonal home search OVER THE PAST THREE MONTHS (ie., April, May and June of 1992).

21. In the **past three months**, who in your household has been most influential in making decisions about a seasonal home purchase? *(please check one.)*

- ☐ Me
- ☐ Another adult in household
- ☐ Decisions have been shared equally between adults.
- ☐ Decisions have been shared equally between adults and children.

22. In the **past three months**, how often have you used the following information sources to help you in looking for a seasonal home location? ***(please circle one number after each information source.)***

	NEVER *(0 times)*	SELDOM *(1-2 times)*	SOMETIMES *(3-5 times)*	OFTEN *(6+ times)*
Realtors	1	2	3	4
Friends and relatives	1	2	3	4
Newspaper and magazine articles	1	2	3	4
Travel guides	1	2	3	4
Personal visits to potential areas	1	2	3	4
Real estate guides	1	2	3	4
Classified advertisements	1	2	3	4

23. During the **past three months**, how many different areas have you **visited** to look at seasonal homes?

*(number of areas visited)*_____

24. Over the **past three months**, what area has been the primary focus of your seasonal home search? ***(if none, skip to question 25).***

*(community or county)*_____

How long have you been considering this area?_____

What do you like about the area?_____

What do you dislike about the area?_____

If you do buy a seasonal home, what do you feel is the probability it will be in the area you are currently focusing on? ***(please circle one number on the scale below.)***

For Sure		Likely		Not Likely		No Chance
100%	80%		60%	40%	20%	0%

25. How has your seasonal home search changed over the **past three months**? ***(please check each statement that applies.)***

Over the past three months, I have . . .

- ☐ Changed my mind about how much money to spend on a seasonal home.
- ☐ Changed my timeline for purchasing a seasonal home.
- ☐ Learned about a new area.
- ☐ Begun considering an area I had not been interested in.
- ☐ Stopped considering an area that had been of interest.
- ☐ Changed my mind about what features are most important in a seasonal home area.
- ☐ Changed my mind about what features are most important in a seasonal home property.
- ☐ Decided not to purchase a seasonal home.
- ☐ Finalized plans to purchase a seasonal home.

The following questions request descriptive information about you and your family. This information will be kept in the strictest confidence and used only for statistical purposes. You may skip any question you do not wish to answer.

26. What three outdoor recreation activities do you and your family enjoy most?

(1)_____ (2)_____ (3)_____

27. Please indicate your level of agreement or disagreement with the following statements describing the degree to which you have travelled throughout the Midwest, the United States, and internationally. *(please circle a response for each statement.)*

Statements:	Strongly Agree		Neutral		Strongly Disagree
I have travelled a lot in the midwest	1	2	3	4	5
I have travelled throughout the United States	1	2	3	4	5
I consider myself a well travelled person	1	2	3	4	5

28. What is your age?_____

29. Are you: *(Check one)*

☐ Female ☐ Male

30. Do you have children living at home? *(Check one)*

☐ No *(SKIP TO QUESTION 31)*

☐ Yes ——→ What ages are your children? *(Check all that apply.)*

☐ Under 12 ☐ Over 12

31. What is the highest level of education you have completed? *(Check one)*

☐ Elementary school
☐ Junior high school
☐ High school
☐ Associate or technical degree
☐ Bachelor's degree
☐ Graduate or professional degree

32. What is the ZIP code of your permanent residence?

_____

33. What is or was your occupation?

_____

34. Are you retired?

☐ Yes *(SKIP TO QUESTION 35)*
☐ No ——→ Have you begun to plan for retirement? *(Check one)*

☐ No
☐ Yes _____ *(expected year of retirement)*

35. What was your household income in 1991? *(Check one)*

☐ less than $50,000
☐ $50,000 to $100,000
☐ Over $100,000

To track your progress in finding a seasonal home, we would like to send you one additional questionnaire in October. If you would prefer NOT to receive a second questionnaire, please check here. ☐

Thank you very much for your participation.

Please return the completed questionnaire in the business reply envelope.

APPENDIX C.

SECOND PHASE QUESTIONNAIRE

October 24, 1992

Dear Seasonal Home Buyer,

In late June or early July, you were sent a Survey of Seasonal Home Buyers. We received your response and appreciate your cooperation. The enclosed questionnaire is the second and final phase of our study. In order to understand how the seasonal home decision process changes over time, a second survey is necessary. This questionnaire is much shorter than the first. It should take you only 5 minutes to complete. Once again, we have enclosed a self addressed business reply envelope for your convenience.

Your participation in this second phase of the study is VERY important. Your responses are important to us whether you are still searching for a seasonal home, have purchased a seasonal home, or have given up on trying to find one. By combining what we learn from your first and second phase responses, we hope to develop a comprehensive description and understanding of how the seasonal home decision process changes over time.

Our first letter informed you about the conditions of your participation and our use of the results. Those portions of the first letter are repeated in the box below for your convenience.

Michigan State University, in cooperation with the United States Forest Service, is conducting a study to better understand how people identify and evaluate seasonal home areas and properties. You were identified by a Michigan real estate firm as someone interested in a seasonal or retirement home. If you have no interest in a seasonal home or do not wish to participate, simply return the questionnaire to us in the enclosed business reply envelope.

The study results will appear as part of a doctoral dissertation at Michigan State University. Results will also be distributed in summary form to the U.S. Forest Service and real estate firms that have helped in identifying names and addresses. Be assured that real estate firms will NOT see any of the completed questionnaires or in any way be able to identify any responses with your name. This survey is in no way associated with any solicitation or sales of seasonal homes. We will not provide your name and address to anyone else or in any way permit your participation in this study to be used for any commercial purpose.

Please complete the enclosed questionnaire. If you have any questions about the study, you may call me at (517) 355-7740 in the morning or (517) 353-5190 during the afternoon. Once again, we will be happy to share our findings with you. Those of you who requested a summary of results can expect to receive it in January. If you would like to receive the summary but did not request it on the first survey, just write the word "SUMMARY" on the cover of the survey form.

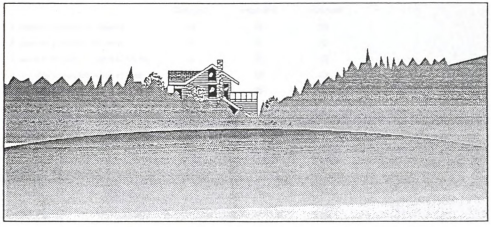
Again, thank you very much for your help with this study.

Sincerely,

Susan I. Stewart
Research Project Coordinator

Survey of Seasonal Home Buyers

Michigan State University
Department of Park and Recreation Resources
East Lansing, MI 48824-1222



1. Which of the following best describes the current stage of your search for a seasonal home? ***(please check one.)***

   - ☐ I am not yet sure I want to buy a seasonal home, but I have begun looking.
   - ☐ I am in the process of getting to know the seasonal home market, determining how much I can afford to spend, and deciding what kind of seasonal home will best suit my needs.
   - ☐ I am familiar with the seasonal home market and am now spending time and effort gathering information about specific seasonal home properties and areas.
   - ☐ I have narrowed my search to a single area and am looking at properties in that area.
   - ☐ I have looked at enough seasonal home properties to identify some good options, and am in the process of deciding among them.
   - ☐ I have purchased a seasonal home.
   - ☐ I have stopped looking for a seasonal home because *(please specify)* _____
   - ☐ None of these describe me because *(please specify)*_____

		For Sure		Likely		Not Likely	No Chance
2.a.	How likely are you to buy a seasonal home within the next 12 months? ***(please circle one.)***	100%	80%	60%	40%	20%	0%
2.b.	How likely are you to buy a seasonal home within the next five years? ***(please circle one.)***	100%	80%	60%	40%	20%	0%

3. How much money do you plan to spend on a seasonal home in the event that you buy one? ***(please indicate your minimum, preferred, and maximum purchase amounts (in dollars) on the lines below.)***

	Minimum	Preferred	Maximum	Don't Know
(dollars)	_____	_____	_____	☐

In the previous survey, we asked you to think about a number of factors that may be important to you when looking for or evaluating seasonal home areas and properties. In the next four questions, we would like to know whether the importance of these factors has changed. By seasonal home AREA we mean the community or county in which a seasonal home is located. By seasonal home PROPERTY we mean the seasonal home itself and the lot it sits on.

4. Since July, have any of the following reasons for purchasing a seasonal home become more or less important to you? If their importance has NOT changed, check the box in column one *(please check one response for each statement.)*

	Has Not Changed	More Important	Less Important
A place for outdoor recreation	☐	☐	☐
A place to get away and relax	☐	☐	☐
A place to be with friends and family	☐	☐	☐
A possible retirement home or area	☐	☐	☐
An investment	☐	☐	☐

5. Since July, have you become more or less concerned about any of the following reasons for not buying a seasonal home? If your level of concern has not changed, check the box in column one. *(please check one response for each concern)*

	Has Not Changed	More Important	Less Important
Not sure I/we can afford it	☐	☐	☐
Time or expense of maintenance	☐	☐	☐
Time or expense of travelling back and forth from home	☐	☐	☐
Concerns about security and vandalism	☐	☐	☐
Might limit travel to other vacation areas	☐	☐	☐
Not familiar enough with seasonal home areas	☐	☐	☐

6. Are any of the following seasonal home AREA characteristics more or less desirable to you than they were in July? If your preferences have not changed, check the box in column one. *(Please check one response for each characteristic.)*

	Has Not Changed	More Desirable	Less Desirable
Water (lakes or streams)	☐	☐	☐
Forests	☐	☐	☐
Recreation opportunities	☐	☐	☐
Shopping areas	☐	☐	☐
Medical facilities	☐	☐	☐
Cultural and social activities	☐	☐	☐
Near friends or relatives	☐	☐	☐

7. Are any of the following seasonal home PROPERTY characteristics more or less desirable to you than they were in July? If your preferences have not changed, check the box in column one *(Please check one response for each characteristic.)*

	Has Not Changed	More Desirable	Less Desirable
Rental income	☐	☐	☐
Property appreciation	☐	☐	☐
Security arrangement	☐	☐	☐
View of water	☐	☐	☐
View of forest	☐	☐	☐
Forested acreage	☐	☐	☐
Water frontage	☐	☐	☐

8. In July we asked you to indicate how well the following statements described your approach to finding a seasonal home. A person's approach to finding a seasonal home may change over the course of the decision process. Please indicate how well each statement describes your current approach by indicating the extent to which you agree or disagree with the statement. *(please circle one response for each statement.)*

Statements:	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
There are very specific features I am looking for in a seasonal home	1	2	3	4	5
I like to look at a number of properties before making an evaluation	1	2	3	4	5
I only investigate properties that meet my criteria	1	2	3	4	5
A single factor often determines whether a property is acceptable to me or not	1	2	3	4	5
I consider seasonal homes in one area at a time	1	2	3	4	5
Immediately after looking at each property, I evaluate it and decide whether or not it is worth seriously considering	1	2	3	4	5
I am not willing to look at individual properties until I decide that the area is acceptable	1	2	3	4	5
When I am ready to make a final decision, I will review all of the properties I have considered	1	2	3	4	5

In the next two questions, we are interested in how your search and evaluation activities have changed over the past three months. By SEARCH activities we mean visiting, reading, asking about or learning about seasonal home locations; by EVALUATION activities we mean comparing, judging, rating, or ranking seasonal home locations.

9. Compared to early summer (April, May and June), how much time have you spent on seasonal home SEARCH activities in the past three months (August, September and October)? *(please check one)*

Much Less	Somewhat Less	Same Amount	Somewhat More	Much More
☐	☐	☐	☐	☐

10. Compared to early summer (April, May and June), how much time have you spent on seasonal home EVALUATION activities in the past three months (August, September and October)? *(please check one)*

Much Less	Somewhat Less	Same Amount	Somewhat More	Much More
☐	☐	☐	☐	☐

The next five questions ask about your seasonal home search OVER THE PAST THREE MONTHS (ie., August, September, and October of 1992).

11. In the **past three months**, how often have you used the following information sources to help you in looking for a seasonal home location? *(please circle one number after each information source.)*

	NEVER *(0 times)*	SELDOM *(1-2 times)*	SOMETIMES *(3-5 times)*	OFTEN *(6+ times)*
Realtors	1	2	3	4
Friends and relatives	1	2	3	4
Newspaper and magazine articles	1	2	3	4
Travel guides	1	2	3	4
Personal visits to potential areas	1	2	3	4
Real estate guides	1	2	3	4
Classified advertisements	1	2	3	4

12. During the **past three months**, how many different areas have you visited to look at seasonal homes?

*(number of areas visited)*_____

13. In the **past three months**, who in your household has been most influential in making decisions about a seasonal home purchase? *(please check one.)*

- ☐ Me
- ☐ Another adult in household
- ☐ Decisions have been shared equally between adults.
- ☐ Decisions have been shared equally between adults and children.

14. Over the **past three months**, what area has been the primary focus of your seasonal home search? *(if none, skip to question 15).*

*(community or county)*_____

Was this area the primary focus of your search four months ago? YES ☐ NO ☐

How long have you been considering this area?_____

If you do buy a seasonal home, what do you feel is the probability it will be in the area you are currently focusing on? *(please circle one number on the scale below.)*

For Sure		Likely		Not Likely	No Chance
100%	80%	60%	40%	20%	0%

15. Compared to early summer (April, May and June), how has your seasonal home search changed over the **past three months**? *(please check each statement that applies.)*

Over the past three months, I have . . .

- ☐ Changed my mind about what type of seasonal home I prefer to own. (e.g., single family home, condominium, cabin)
- ☐ Changed my mind about what type of neighborhood or setting I prefer (e.g., residential neighborhood, seasonal home owners' association, resort development, sparsely populated rural area, secluded rural area)
- ☐ Learned about a new area.
- ☐ Begun considering an area I had not been interested in.
- ☐ Stopped considering an area that had been of interest.
- ☐ Begun considering areas further away from home
- ☐ Begun considering areas closer to home
- ☐ Changed my mind about what features are most important in a seasonal home **area**.
- ☐ Changed my mind about what features are most important in a seasonal home **property**.
- ☐ Decided not to purchase a seasonal home.
- ☐ Finalized plans to purchase a seasonal home.

16. What is the ZIP code of your permanent residence?

_____

17. Are you . . . ☐ Female ☐ Male

Thank you very much for your participation.

Please return the completed questionnaire in the business reply envelope.