

# Personal Futures: Foresight & Futures Studies for Individuals

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**A thesis submitted in partial fulfillment of the requirements of Leeds  
Metropolitan University for the degree of Doctor of Philosophy**

**August 2005**

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Printed in Harlingen, Texas

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# Acknowledgements

Several people provided help and encouragement during the process of conducting the research and reporting the results and conclusions contained here. I would like to acknowledge the contribution of some of those people, listed alphabetically.

**Dr. Peter Bishop**, Chair of the Studies of the Future program at the University of Houston Clear Lake, who provided encouragement, guidance and expertise from the beginning to the end of this experience.

**Jay Forrest**, who came with me to Leeds for the PGCRM, entered the PhD. program and is nearing completion of his dissertation. We've shared progress and challenges together.

**Jeff Gold**, Principal Lecturer in Human Resource Management at Leeds Business School, who supervised my work, offered expertise, guidance and friendship throughout and encouraged me to investigate many areas that I would not otherwise have discovered.

**Eamonn Judge**, Professor of Economics and Spatial Policy and Director of the Leeds Business School Doctoral Programme, also a supervisor, who offered considerable experience, expertise and guidance to this effort.

**Erin King**, who proofread and edited many versions and rewrites.

**Graham May**, of Futures Skills and former Principal Lecturer in Foresight and Futures Studies at LMU, encouraged me to enter the PhD. program at Leeds Metropolitan University, supervised my research during the first two years and offered friendship, advice and expertise throughout this endeavour.

**Dr. Wendy Schultz**, who introduced me to the PhD. program and the department of Foresight and Futures Studies at Leeds Metropolitan University and encouraged me to enrol here.

**Betty Wheelwright**, who encouraged me to return to school when my peers were retiring, further encouraged me through the conduct of the research and writing of this thesis and has been my strongest supporter throughout.

# Abstract

There is evidence that throughout recorded history, individuals have desired to know about the future. In the past, and to some degree in the present, they have consulted seers, fortune-tellers, astrologists and others in hopes of learning about the future.

Since the middle of the twentieth century, methods have been developed to help business and governmental organizations anticipate possible futures. Although the methods of the discipline of Foresight and Futures Studies are recognized and accepted around the world, the concepts and practice have not been applied to individual lives in any appreciable numbers. The complexity of the futuring process appears to be the primary barrier to applying futures method to individual lives.

This research seeks first to reduce the complexity barrier by identifying foreknowns in human life, the elements of life that can be reasonably anticipated. Three categories of foreknowns emerged during the research:

- Life stages, which provide time frames and images of the future
- Personal domains, representing the forces within life
- Major life events, the indicators of change or transformation.

These foreknowns, when combined, form a framework of information from which an individual can explore and prepare for the future using recognized futures methods such as scenario development and strategic planning.

# 1.0 Introduction

## 1.1 Introduction to the research

This thesis is a study of personal futures, specifically identifying and dealing with barriers that impede or discourage individuals from the use of the methods of foresight and futures studies. This chapter will introduce the study as a whole by briefly describing how the research area developed, the aims and justification for the research, the contributions of the research to Foresight and Futures Studies and the methods applied in the conduct of the research.

Following this introductory chapter, the second chapter will introduce the assumptions that underlie the discipline of Foresight and Futures Studies, suggest a procedure for developing personal futures for individuals and introduce futures methods included in this proposed procedure. Methodology, methods and the conduct of the research will be discussed in the third chapter. The results of the research will be presented and analyzed in the fourth chapter, and resulting concepts introduced. The fifth chapter will explore the literature of several disciplines for perspectives that relate to the results of the research. The sixth and final chapter will discuss the conclusions drawn from the research, identify original contributions of the research to Foresight and Futures Studies and suggest practical applications of the research concepts.

## 1.2 Background to the research

This research grows from an awareness that although methods for the study of the future are well established and have been in use by businesses and governments around the world for decades, there appears to be little apparent application of these methods to the lives of individuals. Very little literature is available relating to the application of methods of foresight and futures studies to the lives of individuals. A survey of universities worldwide that offer programs in Foresight and Futures Studies, conducted by the Australian Foresight Institute (2002), reveals that none of these programs offer courses in personal futures or the application of futures methods to individuals. A bimonthly review of futures literature, *Future Survey*, edited by Michael Marien (2005) includes an annual index each year compiled by Lane Jennings (2001-2004). The index has no entries for Personal Futures or Individual Futures for the years 2001 to 2004. A search of archives from 1992 to 2005 found two references to personal futures under “Methods” in 1999, cited in Chapter 2.0. This virtual absence of literature relating to personal futures or personal futures methods suggests that a substantial area within the discipline of Foresight and Futures Studies has not yet been thoroughly explored. Consequently, the research begins with the question, “Why aren’t individuals making greater use of futures methods?”

Several possible answers to this question include:

- *There is no interest in personal futures-*

This does not appear to be likely, since individuals have been fascinated by the future since earliest recorded times (Mack 1995), and still patronize astrologists, card readers and fortunetellers.

- *Futures methods are widely used by individuals, it's just not apparent-*  
No evidence was found to support this possibility, and specifically, very little literature appears to be available to guide individuals in the use of futures methods, although considerable literature is available relating to the application of futures methods to business, government and nongovernmental organizations.
- *People are not aware of futures methods –*  
Futures methods are taught in schools and used in business at many levels around the world, so there should be considerable awareness of futures concepts. Business publications and popular magazines refer frequently to strategic planning, scenarios and other methods or terms related to the future.
- *Futures methods are too difficult for individuals-*  
Futures methods are taught in schools from kindergarten through twelfth grade in many parts of the world, although little information appears available to suggest that this knowledge is being applied to individual lives.
- *The futuring process is too complex to attract individuals –*  
No evidence appears available to refute this proposition, and some aspects of the futuring process do appear to be complex. Creating scenarios for individuals, a method for learning about plausible futures, would presumably require some knowledge about the individual's present and the past in order to determine what forces are present or dominant in that person's life, the direction of those forces and how those forces impact each other. Uncovering this information may appear complex to many individuals.

Of these possibilities, the last, complexity, seems most plausible and raises questions about conducting personal futures research. Where does an individual start? If the individual is aware of the scenario method, for example, how does he or she go about creating personal scenarios? What information is required to establish a baseline of personal information to which futures methods can be applied? What are the probabilities or foreknowns that will guide an individual into the future? What are the driving forces and trends? These questions raise additional questions including: Why is the futuring process for individuals so complex? What are the specific barriers? Can the process be simplified, without reducing the validity of the result?

### **1.3 Justification for the research**

The practice of conducting effective futures research is a complex process that requires considerable time and expertise. Futurists who have the necessary expertise perform futures research for organizations and provide an economically valuable service for their client or firm, but the complexity of the research process has existed, and continues to exist, as an apparent barrier to conducting personal futures research. This thesis research will be conducted specifically to explore new concepts and approaches that should lead to the reduction of complexity and removal of existing

barriers to the study of personal futures and allow average individuals access to the benefits of foresight.

This research is expected to contribute to the field of Foresight and Futures Studies a framework of foreknowns that will substantially reduce the complexity of conducting personal futures research. This framework will enable academic futurists and futurist practitioners to develop codified learning materials for use by individuals to explore their personal futures either individually or in groups, thereby delivering the benefits of foresight to any individual with an interest in understanding the future.

#### **1.4 Aims of the research**

From this background, the intent of this research is to learn why the methods of foresight and futures studies are not broadly used and accepted by individuals to understand and plan for their personal futures and to determine what could be done to remedy this situation. Thus, the aims of the research will include:

1. Identify the barriers to widespread acceptance and use of personal futures methods
2. Define a model for the conduct of personal futures
3. Understand and identify practical approaches to reduce, circumvent or eliminate the barriers to the study of personal futures
4. Organize the results of the research into a format that would be useful to futurists and individuals with a desire to conduct meaningful research into personal futures.

Discussions with futurists and individuals suggest that the problem of complexity centres on the fact that each individual's life is unique, that there are a great number of variables to consider, and individual research is time consuming. These discussions and a knowledge of futures literature and methods suggest that the area of greatest complexity lies in conducting research into the individual's life prior to applying futures methods.

Contemplation following these discussions has been influenced by the work of Bertrand de Jouvenel (1967) who stressed the awareness of "foreknowns" as well as by Dator's (1996) admonition that futures, whether for individuals, groups or organizations, result from the interactions between events, trends, images and actions. This combination of conversations and influences has set the direction of the research as a search for personal foreknowns, based on the belief that knowledge of common or generalizable foreknowns will be helpful in reducing the complexity of the personal futures process.

#### **1.5 Original contributions**

The research will result in several original contributions to Foresight and Futures Studies, as defined by Phillips and Pugh (2003) and detailed in the final chapter. Briefly stated, they will include

- A personal futures framework of foreknowns that makes a “synthesis that has not been made before” (p.63) and presents a “new piece of information in writing for the first time” (p.63).
- For use in personal futures research, four proposed life stages to replace Erikson’s eighth stage of life, “Old Age.” This continues the “previously original piece of work” (p.63) by Erikson, Erikson and Kivnick (1986) in psychology and demonstrates “cross-disciplinary” (p.64) research.
- Six personal domains, or forces in life, “... areas that people in the discipline [Foresight and Futures Studies] haven’t looked at before” (p.64).

Most importantly this research will introduce a new approach to personal futures that offers the possibility that “...people in their everyday lives can use the futures perspective to discover and create choices for themselves” (Bell, 1997 p. xxiii).

## **1.6 Methodology and methods**

It is apparent that the research will be exploratory in nature and that considerable data will be generated before concepts, propositions or hypotheses can be developed. A qualitative research methodology that can explore uncertainties and develop data and concepts will be required, and the methodology selected for this research is Grounded Theory as described by Glaser & Strauss (1967) and supplemented by Glaser (1998). Data will be collected utilizing multiple methods including interviews, observations, surveys, document studies, field research of facilities and focus groups. The data collected will initially be open-coded, then codes will be compared and grouped into categories. Categories will be compared and grouped into larger categories, eventually forming core categories. Literature from multiple disciplines will be consulted to clarify concepts and questions that may be raised, leading to further research.

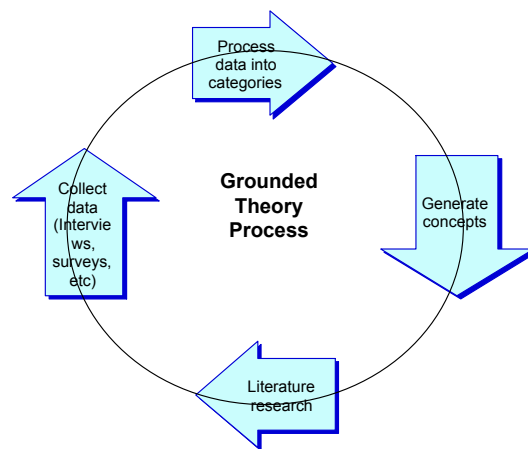
The research will begin with a general problem of complexity in personal futures research, without real research questions, and with a broad substantive area to be explored for foreknowns. There is no hypothesis, only questions, all of a qualitative nature. Exploratory research of this broad nature appears well suited to grounded theory (Glaser & Strauss 1967) as a methodology that would explore a substantive area to learn about people’s interests and concerns.

As each of the core categories emerge from the data, questions will arise as to how the category relates to the study of personal futures, which will lead to further research. It is helpful to note that the categories emerge from the data during the research, not from the literature. The early focus of the research will be on life after age sixty, reflecting the initial interest in life stages and the potential for expanding Erik Erickson’s (1986) “Old Age” stage into multiple stages. As the core categories emerge and the significance of each becomes apparent, the research will be allowed to expand to all stages of life.

As described in Glaser & Strauss (1967) and in Glaser (1987), the development of the core categories and related concepts leads to literature research to find what other



researchers or theorists have found in similar areas. It is expected that the literature will suggest new questions and different areas to explore, creating a circular approach to the research, approximated in the following diagram.



*Figure 1.1- Grounded theory research is a circular and iterative process.*

Grounded theory relies on repetition, asking the same questions or variations repeatedly, finding similar data in multiple situations and constantly comparing the results. This process will lead to core categories and eventually to concepts and conclusions.

### 1.6.1 Research Methods

The research for this thesis will be exploratory in nature, and will be constantly seeking data about life that would suggest foreknowns. Six methods will be employed for collecting data, all consistent with grounded theory methodology.

	<b>Brief description</b>	<b>Reason method was selected</b>
<b>Interviews</b>	Individual interviews, conversations and case studies	This method starts with the individual, encouraging each person to discuss their interests or concerns about a variety of topics.
<b>Observation and Participant Observation</b>	Observes individuals and groups in their own environments, usually as a participant	This method studies both individual and group interaction and behavior in everyday settings. An effective method for generating raw data.
<b>Surveys</b>	Mail surveys to randomly selected individuals from a	This method gathers data from a large number of people who answer specific questions that arise from other research methods.

	known population	
<b>Document study</b>	Study a variety of documents including legal forms, regulations, contracts, brochures and other documents	This method obtains both general and specific data from diverse types of documents that impact individual's lives, whether through regulation, legal protection, contracts, insurance services and advertising.
<b>Field research</b>	Primarily related to visits to medical and health care facilities	Field research will investigate the many types of medical and care facilities utilized by people of all ages.
<b>Focus groups</b>	Discuss concepts raised in the research to obtain reactions and opinions of different groups	This method keeps a researcher in touch with reality by involving varied groups of people in discussions about concepts raised in the course of the research

*Figure 1.2 A table of proposed research methods.*

The data collected from these methods will generate a number of core categories and concepts that will then be explored in the literature, then further refined with additional data. The results will be analyzed and evaluated and conclusions drawn.

## 1.7 Outline of the thesis

### Table of contents

#### 1.0-Introduction

A brief overview of the thesis structure, research aims, methodology and methods.

#### 2.0-Foundation Literature

A review of the literature, assumptions and methods of the discipline of Foresight and Futures Studies as related to personal futures.

#### 3.0-Methodology

A discussion of grounded theory as the methodology, description of the methods used and a detailed explanation of how the research was conducted.

#### 4.0-Results and Analysis

A discussion and analysis of the results obtained from the research, the concepts generated and the relationship of those concepts to personal futures.

### **5.0- Literature Research**

A review of the literature outside the discipline of Foresight and Futures Studies that contribute to the research, following the development of core categories and concepts.

### **6.0- Conclusions and Implications**

A discussion of conclusions that can be drawn from the results and evaluation of the research and of the original contributions to Foresight and Futures Studies.

### **Appendix A-**

Lists examples and types of people interviewed, groups observed and other details of the research.

### **Appendix B-**

Contains copies of questionnaires and results of the trial surveys and the questionnaire for the research survey. Demographic results from the Systematic Survey are also in Appendix B.

### **Appendix C**

Contains a prototype workbook for use in facilitated futures workshops for exploring and developing personal futures.

### **Bibliography**

This thesis is organized in a non- traditional format, reflecting the fact that the research will be conducted using grounded theory. As a result, Chapter 2.0 reviews the literature of Foresight and Futures Studies, which provides the foundation assumptions and methods upon which the research will be based.

Chapter 5.0 is a review of literature from a number of disciplines outside of Foresight and Futures Studies, where elaboration is sought for the concepts developed during the research.

## **1.8 Definitions, Delimitations and Assumptions**

**Future studies-** “The systematic exploration of the future.” (Bell, 1997).

**Futures methods-** Methods commonly used by practicing futurists to explore or understand the future.. (See 2.4).

**Median-** Calculated using the formula  $(n+1)/2$  where n is the number of respondents to a question (Black, 1994), as opposed to the average of the middle numbers in a series.

**Personal Futures literature-** literature that guides or assists individuals in preparing for their personal futures, based on recognized futures methods.

**Range-**The ordered pair of smallest and largest numbers (10 to 90) in a data set (Black, 1994) as opposed to a single number which is the difference between the largest and smallest number in the range.

**Trend-** a line of development over time drawn from time series data. A trend line may be extrapolated into the future

### **Delimitations of scope and key assumptions**

This thesis deals with personal futures, which are described as those parts of the future that are directly related to individuals. Consequently, the proposals presented in this thesis do not attempt to deal with large outside forces such as social change, technology advancement, the economy, ecology and politics, even though these forces affect individuals, as these are issues to be dealt with on another level.

Although literature research will be conducted in a number of disciplines, the intent of this research is to contribute to and expand knowledge within the discipline of Foresight and Futures studies.

Research was conducted primarily in the United States for convenience and cost although interviews and observation were conducted in several other countries. The research is specifically limited to the field of personal futures, although information affecting or relating to personal futures is sought out in a number of different fields and disciplines.

Key assumptions underlying this research include:

- Individuals are interested in their personal futures
- Futures methodology is scalable to individual use
- The assumptions of Foresight and Futures Studies offered by Bell (1997).
- Complexity is a barrier to the study of personal futures.

### **1.9 Chapter Conclusion**

This chapter has introduced the research topic, personal futures, described the apparent problem and identified the aims of the research. The chapter has also justified the research, introduced the methodology, described the research methods and identified original contributions to Foresight and Futures Studies.

The next chapter will briefly explore the foundation literature for the thesis, the literature of Foresight and Futures Studies. The futures literature will introduce assumptions that underlie the discipline and this thesis. This chapter will also describe selected futures methods and some requirements for their use while exploring simplification that could benefit personal futures research. Finally, the chapter will propose a model of a personal futures project for individuals.

# 2.0 Foundation literature

## 2.1 Introduction

This thesis focuses on the fact that although the literature and methods of Foresight and Futures Studies have been available and practiced by business for decades, individuals are making very little apparent use of futures knowledge or methods. This problem appears to be a consequence of complexity in the futuring process. This chapter introduces the literature and methods of foresight and futures studies, analyzes the problem of complexity and proposes an approach to personal futures that provides individuals with an understanding of plausible personal futures as well as a method to achieve personal goals and attain preferred futures.

## 2.2 Foresight and Futures Studies

This thesis draws from a variety of disciplines, but the intent and purpose of the research is to contribute to the discipline of Foresight and Futures Studies. The theoretical fundamentals underlying Foresight and Futures Studies provide the foundation upon which this thesis is constructed and exert considerable influence over the research. It is helpful then to explore the philosophical underpinnings of this field in order to understand the assumptions upon which any conclusions reached in this thesis rest.

Bertrand de Jouvenel (1967) argued that although we cannot “know” the future, conjecture about the future is both reasonable and necessary. In fact, “we treat many aspects of [the future] as known, and if we did not we could never form any projects” (p.41). De Jouvenel goes on to introduce the concept of alternative futures, or “a fan of possible futures” adding that

...we cannot say with certainty which of the seemingly possible futures will actually come about, nor even whether the future which will actually come about is contained in our fan of possible futures (p.16).

This concept of alternative futures underlies much of futures methods and practice today, and is the basis for the scenario development method.

### 2.2.1 Assumptions underlying Foresight and Futures Studies

Wendell Bell, Professor Emeritus, Yale University has compiled in his two volume *Foundation of Futures Studies* (1997) both an overview of the theory and methods of Foresight and Futures Studies as well as an in depth view of the ethics and philosophy of the field. Bell describes the two books as a “synthesis of other people’s work” and draws on a number of earlier writers and thinkers. Bell offers nine key assumptions and three general assumptions, presumably the beginnings of a theoretical base for studies of the future. From Bell’s list of twelve assumptions, four stand out as important to providing the basis for the concept of alternate futures, which in turn is the foundation of much futures research and practice today. The selected four assumptions are:

- “The future is non-evidential and cannot be observed; therefore there are no facts about the future.”
- “The future is not totally predetermined.”
- “To a greater or lesser degree future outcomes can be influenced by individual and collective action.”
- “Some futures are better than others.”  
(Bell, 1997 pp.115-164)

The first of these assumptions establishes that there are no facts about the future (De Jouvenal, 1967), and that no matter how strong the evidence may be that an event may occur in the future, it cannot be known whether that event will occur until it is in the past. The next assumption leads to the concept of alternate futures, a concept that underlies much of futures practice. As De Jouvenal suggests, if the future is not totally predetermined, then it follows that there are multiple possible futures.

The third of the listed assumptions infers that actions taken in the present may influence the future, or stated more emphatically, that individuals or organizations may be able to change or determine their future by actions taken in the present. The fourth assumption points out that some futures are better than others, implying that it is possible to choose a desirable future or to avoid an undesirable future.

Futurists believe it is reasonable to attempt to study possible, plausible, probable and preferable futures. It is important to note that futures that are possible, plausible or probable are likely to include undesirable futures. There is value in understanding which futures are to be avoided or, if unavoidable, for which futures reasonable preparations must be made.

Pearson (1998) offers a straightforward point of view.

The present is simply the realization of decisions made in the past. We can enjoy it and experience it but again we can't change it. Every action that occurs now is the result of an earlier action, however recently it occurred. It is an experiential boundary, a mix of past experience and future planning.

But the future is where we will spend the rest of our lives, and we can control it - to some extent. It is the only part of our lives we can affect. We need to know the options open to us, and how to determine what happens. If you believe in fate, that the future is fixed, then there is nothing you can do about it. You might as well just sit back and watch it happen. But the future is not fixed. Some of it is decidedly outside our control, other bits are entirely up to us, most is somewhere in between. (p. 7).

## 2.3 Personal futures

The study of personal futures has not received much attention from futurists, which is remarkable considering that it could reasonably be argued that the futures of businesses, nations and the world may well be exceeded by the sum of the personal futures of their respective populations. In discussing literature relating to personal futures, this thesis will focus on literature that meets two criteria:

1. The literature is created or intended to help individuals explore and plan for their personal futures.
2. The methods of exploration and planning for the future include or are based upon recognized futures methods such as those discussed in section 2.4.

Although several futurists (De Jouvenel, 1967), (Jungk, 1976), and (Bell, 1997), among others, have written about futures theory in terms of individuals, the concept of personal futures based on futures assumptions and methods has not attracted a great deal of interest and remains an underdeveloped area of Foresight and Futures Studies. Despite the abundance of personal advice literature, existing literature related to personal futures based on futures methods is very limited. This may suggest that a circular problem exists, in that the conduct of personal futures has been perceived to be difficult or non-economic, therefore not much practical work or research has been done in this area. Consequently, because little practical work has been done, very little literature exists relating to personal futures. Because little literature is available, the field is perceived as difficult and not much work is done in personal futures. Before drawing conclusions, an exploration of personal futures literature that does exist may be helpful.

Several prominent futurists have commented favourably on the concept of personal futures or the application of futures methods to personal futures and the lives of individuals:

*The ability to use foresight in order to make wise or prudential choices is one of the most powerful capabilities of individuals. (Hayward and Krishnan 2002 p.1)*

*A futures-oriented approach can provide individuals with a new set of tools, which may prove to be more useful in identity-construction and responsibilities they must take on in late modernity. (Rubin, 2000 p179)*

*...People in their everyday lives can use the futures perspective to discover and create choices for themselves, (Bell, 1997 p. xxiii)*

*The central task of FS [Futures Studies] could therefore be to map the parameters of the re-enchanted world and to bring many more people into an active engagement with their own potentials... (Slaughter, 1998).*

*...futures-oriented activities are useful to individuals, families, communities, corporations, governments—to everyone and every group. (Dator, 2000 p.1)*

Although there is agreement among many futurists about the value and importance of futures concepts to the lives of individuals, the area of personal futures using recognized futures methods is relatively underdeveloped and not clearly defined. Methods and practices that can be applied specifically to individual futures are limited, although some steps have been taken and some groundwork laid. Morrissey (1992) introduced the use of strategic planning principles for individuals, placing a heavy emphasis on career planning and providing worksheets and checklists. These worksheets and checklists are important steps toward achieving the codification of futures methods as recommended by Bell (1997) in order that “the average person ...

can be taught to use [futures methods] to produce at least a minimally adequate result” (p. 241).

Dator (1996) argues that futures, whether for individuals, groups or organizations, result from the interactions between events, trends, images and actions. If Dator is correct, then it is reasonable to expect that individuals who can realistically identify forces or trends in their lives and likely events in their future can also create images of the future based on those forces, trends and events. With those images of the future in mind, the individual is then in a position to make plans or take actions which may help bring about the positive or preferred futures and avoid the negative or undesirable futures.

Anita Rubin (2000) has conducted unique research that deals specifically with images of the future, how individuals (young Finns) perceive their personal futures and their ability to influence those futures. In addition, her research explores how these young people perceive their ability to influence the future of their country and the world. “Most young people in all age groups felt that their future was in their own hands,” although the “ability to affect global futures seemed to be out of nearly everyone’s reach” (p.85). Rubin also states that

Images of the future, or their lack of, are worthy of our study because we make choices based not only on past experience and current information, but also on our desired future outcomes. Our potential future options and preferred outcomes are explored more or less thoroughly, then evaluated, and finally one is chosen (p.71).

Other forward looking concepts for personal futures are found in Morrissey’s applications of strategic planning to personal futures (1992), which is discussed in depth in section 2.4.4. Harkness’ (1999) attacks the myths of ageing and encourages readers to undertake career planning beyond retirement age. She suggests a version of life stages from twenty through the nineties, terming her model to “live long, die fast” (p.79). Ellis (1998) emphasizes goal setting. making use of several useful diagrams including time lines, personal pie charts and mind maps Tough (1982) explores personal choices and change events, the changes we intentionally make in our lives. The value of this book to personal futures is the discussion of change events rather than the application of futures methods. Smith (1993) provides guided self-analysis to lead the reader through life changes and events toward the future, providing a series of worksheets that help define present, future and preferred patterns in one’s career, activities, leisure preferences and personal philosophy. This book is aimed at adults, with considerable emphasis on middle age and the exploration of changes brought about by ageing. Although targeting adults, Smith discusses the impacts of events involving children and other family members.

Recent literature in the field of disabilities disclosed publications specifically relating personal futures to futures methods,. *Moving On* (Mount et al. 2003) and a related facilitator’s manual (Mount et al. 2003b) are created to help individuals with brain injury to envision, and plan for their futures. Moss and Wiley (2003) have prepared a similar though smaller workbook for the Texas Deafblind Outreach program that emphasizes personal and social relationships, images of the future and an action plan. Although these publications focus on people with disabilities and the problems that are specific to the disabled, the concepts centre on understanding and preparing for the future.



*The Calvert-Henderson Quality of Life Indicators*, (2000) does not deal directly with personal planning, but the editors emphasize systems thinking and provide considerable statistical information that relates to several areas of personal research. Possibly more important is that by bringing attention to quality of life indicators, this book underlines an important reason for studying and preparing for personal futures.

Each of these authors aims toward helping individuals prepare for the future, yet none deal explicitly with the concept of alternative futures, which is considered by many to be the uniting concept among futurists. On the other hand, these writers all support the concept that actions taken in the present can influence the individual's future. A recent exception that does consider alternative futures is a series of four books, *Tackling Tomorrow Today*, created specifically for teenagers (Shostak, 2005). The series includes fifty-eight essays by futurists that make extensive use of scenarios and other futures methods and offers personal guidance to the future. The essays were all reviewed by a panel of teenagers that evaluated each essay for interest and value to teens.

For the most part, references to personal futures and similar related terms were absent from the literature of Foresight and Futures Studies and other fields at the beginning of this research. Searches of the Internet, of the Futures Studies section of the University of Houston Clear Lake Library revealed little of value about applications of futures methods to personal futures. *The Knowledge Base of Futures Studies* (Slaughter & Inayatullah. (ed.) 2000) and more recently *Futures Research Methodology* (Glenn & Gordon (ed.) 2003) were also absent references to the application of futures methods to personal futures. A search of the annual index and the online archives for *Future Survey* (Marien, 1991 to 2005) revealed only two publications relating to personal applications of futures methods, both already cited.

From the foregoing, it is clear that many futurists agree on the value of personal futures, that individuals believe they have some control of their own futures and that some futures methods can be adapted and codified for practical use by individuals. But it is also clear that there is very little literature available that might be construed as helpful or specifically encouraging to the application of futures methods to the lives of individuals.

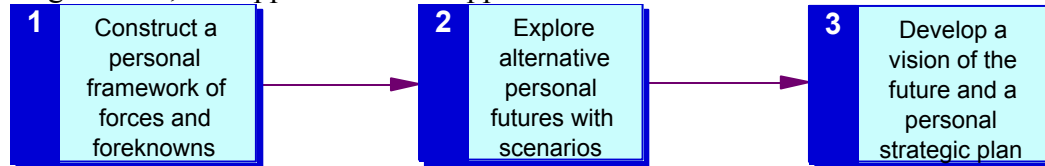
Beyond accepting that personal futures has value to individuals and that futures methods can be useful lies the task of identifying and dealing with the events, trends, images and actions that shape the future. In short, how could or should personal futures research be conducted? Absent a structure or procedure for conducting personal futures, it appeared necessary to construct a procedure or model for conducting personal futures that would provide direction for this thesis. The following is a simplified version of a strategic planning process for business as is practiced by some professional and consulting futurists.

This proposed three-part approach includes:

- Establish a baseline or framework based on where the individual's life is at the present combined with foreknowns, forces and trends in that individual's life that can reasonably be projected into the future

- From the baseline information, construct plausible scenarios for the individual's future
- From the scenarios, devise strategies and make plans for accomplishing or dealing with the various scenarios.

Diagrammed, this approach would appear as:



*Figure 2.1 A simple model for the development of personal futures, including personal research, scenarios and a strategic plan.*

Existing futures methods can provide the second and third steps, and will be described generally in the next section. The difficulty and complexity involved in developing the information required for the first step constitutes a problem that this thesis aims to solve.

Discussions of futures methods tend to focus on the application of the methods and often understate the importance of the research that must be conducted in order to have a basis for applying any futures method. The longest chapter in *The Art of the Long View* (Schwartz, 1991) is the chapter on research, which Schwartz calls “Information-Hunting-And-Gathering,” and suggests the value he places on research. The primary aim of the research in this thesis is the simplification of the research process for individuals who want to explore their futures.

Despite the apparent general agreement among futurists that personal futures are of value to individuals, a review of universities offering courses in Foresight and Futures Studies (Australian Foresight Institute, 2002) revealed no courses related to personal futures offered at any of the listed universities. Whether this omission represents untapped potential, lack of time for additional courses or lack of interest in a course that might be viewed as a “self-help” program is debatable, but suggests a void that could be filled sometime in the future.

An alternate approach is suggested by Jungk & Mullert (1987), who developed a concept for futures workshops that helped common people become involved in solving problems in their communities. “Futures workshops are intended to allow anybody to become involved in their own preferred future rather than being simply subject to the opinions of experts” (May, 1996 p.196). Dator (1993) utilized variations on the future workshop concept to conduct alternate futures exercises for existing organizations and describes this method as “action-oriented” (p.1) futures. A variation on the future workshop has the potential to provide a vehicle for organizing and delivering the information collected in this research to individuals who can benefit from this knowledge.

## **2.4 Futures methods, techniques and tools**

Futures methods are discussed here in order to view some methods that are utilized in futures research and to identify those that appear appropriate for use in personal futures applications. Since a stated objective of this thesis is to simplify the futuring process for individuals, it follows that the concepts introduced should be appropriate to futures methods, and specifically to methods that are scalable and can be simplified for individuals.

Several authors, including Fowles (1978), Glenn & Gordon (1994) (2003), Bell (1997) and Slaughter and Inayatullah (2000) have compiled lists and descriptions of methods that are commonly used in futures research. Glenn & Gordon (2003) list twenty-four different methods currently employed in futures research to identify plausible futures. The emphasis in these methods is to allow researchers to uncover and explore plausible futures, but in practice, futurists are frequently called on to not only identify plausible futures but also to help create plans or strategies to deal with those futures. This suggests that individuals, like businesses and governments, will require methods for seeing and understanding plausible futures and also methods that help the individual plan for and prepare to cope with those futures. For individuals to study the future, it would seem reasonable to limit the number of methods to those that can be easily understood and practiced with a minimum of expertise. It would also appear that methods for individual use should include two categories:

- Methods that lead to seeing or understanding plausible futures
- Methods that help plan or prepare for those futures

In the following sections, precursor analysis, trend extrapolation and scenario development will be described as methods to learn about and understand plausible futures, then strategic planning will be discussed as a method used to plan or prepare for those futures.

### **2.4.1 Precursor Analysis**

Precursor analysis is the study of what has happened in the past that is likely to occur again. Cycles and stages are examples. The World Future Society (2002) describes precursor analysis as:

Precursor analysis is based on the observation that many phenomena go through stages. For example, people go through a series of biological changes from conception through gestation to birth, infancy, childhood, and so on. Similar patterns may be seen in technological and social developments. By knowing the stages of such phenomena, we often can anticipate future developments (p. 3).

Precursor analysis is also found in science and in the analysis of risk of accidents where a precursor event can provide warning that may avoid an accident. In a simple analogy, each season is a precursor to the following seasons, so spring precedes summer, which precedes fall and winter.

Cornish (2004) advocates,

Learn from your predecessors. The great explorers in history always wanted to learn about previous expeditions in order to know how to mount their own and avoid the errors made by others (p. 7).

A study of life cycles and life stages would appear to be a logical form of analysis in the study of personal futures and potential foreknowns, and will be the initial area of research.

#### **2.4.2 Trend extrapolation and trend analysis**

One of the simplest and most commonly used methods of seeing possible futures is trend extrapolation. Trend extrapolation is a fundamental method that underlies much of futures research. “The analysis of trends is based on the empirical examination of some phenomenon with repeated measurements taken across time.” (Hill, 1978 p.250). A trend-line is the line formed by connecting the data points in a time series and the trend is the tendency of that line in any direction over time. The critical requirement for studying or identifying trends is time series data, and longer time periods provide better perspectives for apparent trends. For example, a stock market chart of daily prices for one stock for one month may suggest an optimistic outlook, but seeing the chart for the same stock for a full year may change the perspective for the perceived trend.

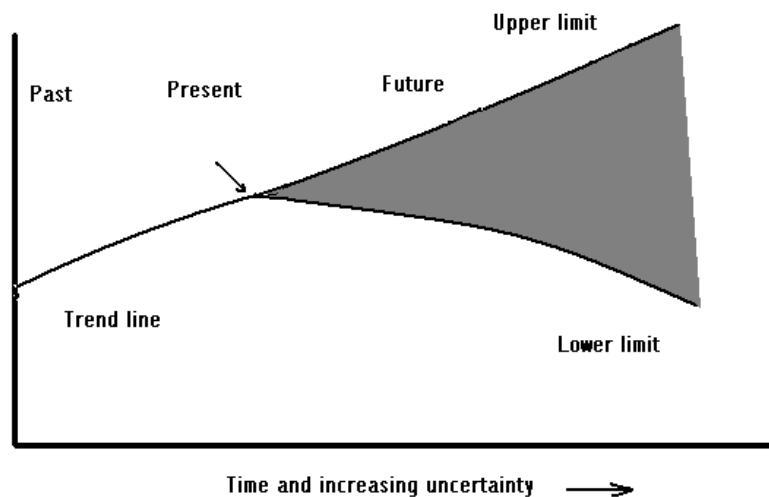
Trend analysis has two essential functions:

- Trend extrapolation can indicate possible directions for the future
- Trend extrapolation can also indicate “what will *not* be the future.” (Strategic Futures Team 2001 p.6).

There are a number of sophisticated tools for projecting trend-lines into the future, but

The simplest and most pervasive approach is mere inspection of the trend data and mental projection into the future. This ‘method’ is entirely satisfactory for answering many rudimentary questions about the trend, but it is very imprecise and can only result in very approximate projections” (Hill 1978 p.256).

Conversely, quantitative analysis of a time series can provide an extrapolation that is mechanical, impersonal and objective and can therefore be tested for correctness of application and statistically validated (Strategic Futures Team 2001). Trend lines indicate change over time. In some cases a trend may become recognized as a force that influences change or impacts other trends. Futurists term such trends “driving forces” or “drivers.” Trends and drivers are the underlying elements in the creation of scenarios (Schwartz 1991).



*Figure 2.2 A trend line can be extrapolated to its upper limit of plausibility and to its lower limit of plausibility, creating a cone of uncertainty or plausibility between the two extrapolated lines.*

A variation on trend line extrapolation is shown above. In this example, the line is extended into the future based on positive information for the top line and negative information for the lower line. In both cases, the information is within plausible values. The areas between the two lines may be referred to as an area of uncertainty or plausibility. Taylor (1991) carried the concept of the cone of uncertainty to another level, bundling multiple drivers or trends together, then placing wild card events in the area outside the cone of plausibility.

A criticism of trend extrapolation is that the method simply projects the past into the future without consideration of the impacts of other trends or events in the future, and that this effect grows more pronounced as the projection reaches further away from the present into the future. Trend impact analysis was developed to illustrate the extent to which an event might impact a trend and the result of that impact over time (Gordon 1994). For example, the diagram below illustrate three possible outcomes after the impact of an event on a trend line:

- A- After the impact, the trend line rests at a state above the original level.
- B- After the impact, the trend line returns to its original level.
- C- After the impact, the trend line rests at a state below the original level.

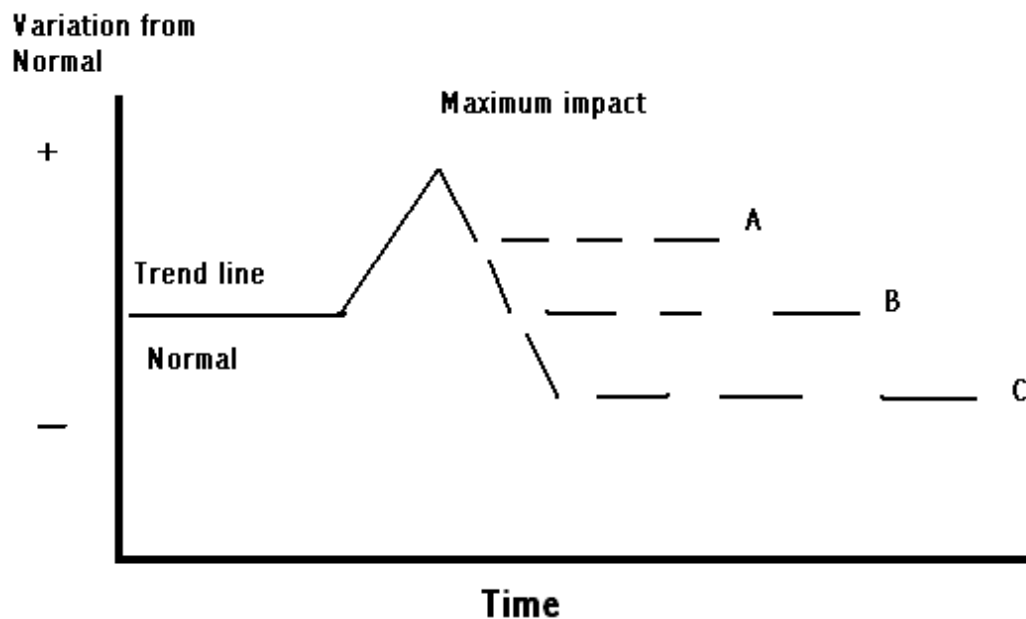


Figure 2.3 Example of trend impact diagram (Gordon 1994) showing a trend line, rising to maximum impact of an event, then falling to A, a level above the original line; B, returning to the original level; C, dropping to a level below the original line.

Trend impact analysis could potentially be used to illustrate impacts of life events listed and rated for impact by Miller and Rahe (1997) as described in 2.2, where the Y-axis would indicate stress level and the X-axis would indicate time. Trend impact analysis could also be used to measure impacts of events on trend lines extrapolated from personal domains. For example, retirement might have a negative effect on finances or a positive effect on family relationships or health.

### 2.4.3 Scenario Development Methods

Scenario development is based on the assumptions listed earlier (2.4) by Bell (1997), specifically the assumption, “The future is not totally predetermined” (p. 150). Accepting this assumption leads to the conclusion “...that there are alternative possible futures instead of *the* future, and, that basically, the future, within limits, is open and not inevitable” (p.154). Another assumptions states, “To a greater or lesser degree future outcomes can be influenced by individual and collective action,” which infers what Bell calls, “one of the most fundamental tenets of futures studies”, that tenet being:

We ourselves help to create the future with our own present decisions and actions (p. 154).

Bell’s ninth assumption states, “Some futures are better than others” (p.157). In sum, the scenario method is based on the theory that there are alternative possible futures, that some futures are preferable to others, and that future outcomes can be influenced by the actions of individuals or groups. The scenario methods described here all seek to “discover or invent, examine and evaluate, and propose possible, probable, and preferable futures” (p.73).

Scenario development includes the creation of multiple stories about possible futures. "The scenario is an effective tool for presenting complex images in a coherent, integrated picture." (Coates, Mahaffie & Hines 1997 p.13). In the context of research in Foresight and Futures Studies, a "distinguishing factor for scenarios is that they are not predictions..." (Chermack, Lynham & Ruona 2001 p.10). This thought is echoed by Ogilvy and Schwartz (2004), and expanded.

Scenarios are narratives of alternate environments in which today's decisions may be played out. They are not predictions. Nor are they strategies. Instead, they are more like hypotheses of different futures specifically designed to highlight the risks and opportunities involved in specific strategic issues. (p.2)

Scenarios are "One of the most productive and durable of all futures tools with a wide range of applications" (Slaughter & Inyatullah 2000 Glossary). This method originated in the work of Herman Kahn at the Rand Corporation (May, 1996) and was brought to public awareness by Kahn's books, including *World Economic Development* (1979) and by former employees of Shell International, Ltd., (Schwartz, 1991) and (Kahane, 2000) where scenarios have been in use for over thirty years. Shell has not only been very open about their scenario planning but has also provided considerable leadership in the public use of scenario methods as seen in the "Mont Fleur" scenarios which were developed for South Africa and later scenarios developed for Guatemala (Kahane, 2000).

Many corporations utilize scenario planning, but businesses are often reluctant to discuss their scenario methods, resulting scenarios or the validity of the scenario method for that company, as the information is frequently considered proprietary or strategic. This raises awareness of the fact that little true evaluation of the scenario method has been conducted according to Chermack, Lyndham & Ruona (2001), who state, "The evaluation component is nearly absent from the literature of scenario planning." (p.28). On the other hand, organizations would be unlikely to invest funds in a strategic method if there were no apparent benefits. It is clear that "considering options will have an impact on perception of outcomes" (Chermack, Lyndham & Ruona 2001 p.28) and some options are not only inconspicuous, but also barely noticed because of their ubiquitous presence. As examples, the scenario method is directly analogous to driver training or flight training in a classroom. In these situations the student is required to consider many of the possible events or situations that can occur when driving or flying, then taught how to deal with those events while still in the safe environment of the classroom. Simulator training carries the analogy to another level.

One of the values of scenarios is that they can help groups or individuals make the mental transition from thinking about the future to thinking about how to prepare to deal with different possible futures. Because of this awareness and preparation for possible futures, the organization or individual is more likely to be ready to cope with whichever future actually occurs.

With the concepts of scenario development and planning in mind, there are a number of approaches that are available for constructing scenarios (Bishop, 1999) and (Chermack, Lyndham & Ruona 2001). Some approaches to scenario development that are well known and in common use are described as follows:

- *The fixed matrix system*

The fixed matrix system is limited to four columns representing “archetype” scenarios (Bezold, Peck & Olson 1998) in a format that usually includes:

1. best case future- every anticipated situation is favourable
2. normative future- the present is extended into the future, with some optimism
3. wild card future – also a transformational future- the unexpected high impact situation occurs
4. worst case future – every anticipated situation is unfavourable

The Institute for Alternative Futures, who pioneered this scenario model recommended a standardized set of scenarios for business futures based on the following headings:

Official Future - Business as Usual  
 Hard Times  
 ‘Structurally Different’ Visionary Leadership  
 Technological ‘Transformation’

The rows of the matrix represent “all the key forces that have been identified” (Bezold, Peck & Olson 1998) in earlier research for this set of scenarios.

- *The open matrix system*  
 In the open matrix, an unspecified number of columns each represent different potential scenarios. Each row in the matrix represents a different issue or domain. The cells at the intersection of the columns and rows are implications to be considered in the scenarios. This system is associated with and favoured by SRI and the UNU Millennium Project (Millennium Project, 1998).
- *The “Uncertainties” method*  
 Rather than constructing a matrix, this method follows a series of steps that work from ‘the inside out’ rather than ‘from the outside in.’ (Schwartz 1991 p.241). These steps include identifying the most uncertain drivers of the future and building logics out of their various permutations (Bishop, 1999). The following steps are the basis for this respected method associated with the Global Business Network and with Shell International.  

Step one: Identify focal issue or decision  
 Step two: Key forces in the local environment  
 Step three: Driving Forces  
 Step four: Rank by importance and uncertainty  
 Step five: Select scenario logics  
 Step six: Flesh out the scenarios  
 Step seven: Implications  
 Step eight: Selection of leading indicators and signposts  
 (Schwartz, 1991 pp. 242-247).



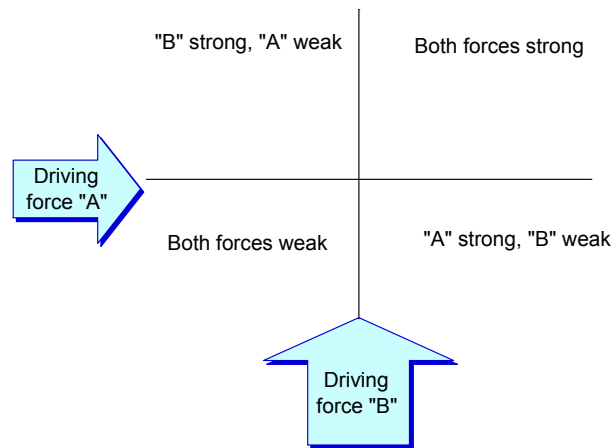


Figure 2.4 A matrix format illustrating how two selected driving forces suggest scenario logics in the quadrants

- *The “Causal Layered Analysis” method*  
This method considers a specific problem or question, seeking a greater understanding of underlying causes of the problem and their roots in the past. Causal layered analysis explores the layers of assumptions, causes, beliefs and myths that underlie the understanding of the present. This method, developed by Sohail Inayatullah (2000) attempts to deconstruct what is “known” about a present situation and identify the problem’s social causes and history. The method then reconstructs the collected information into alternative scenarios. The important advantage of this method lies in its analysis at different levels (present/past), from varying perspectives (local view/world view) and the examination of root causes of the problem. Inayatullah lists four levels of exploration:
  - The Litany
  - Social causes
  - Structure
  - Metaphor

Causal layered analysis asks users to go beyond conventional framings of issues. However, it does not favour any particular level. Moving up and down layers, and horizontally across the discourses and worldviews, increases the richness of the analysis. (Ninth un-numbered page of *Methods and Epistemologies in Futures Studies* 2000).

Causal layered analysis adds a dimension to scenario development that goes beyond traditional methods. In the case of personal futures, this may be an advanced method.

- *The “Manoa” method*  
The Manoa scenario method identifies three or more trends related to a given situation then analyzes the potential effects of their combined impacts (Bishop, 1999). Scenarios are constructed based on the varying impacts of the trends. The Manoa method may be preferred wherever the impacts of multiple trends must be considered.

All of these methods are applicable to complex situations and all require considerable expertise and experience to develop effectively. In addition, most are based on driving forces and uncertainties (Schwartz, 1991) and (Bezold, Peck & Olson 1998).

Many futurists favour the matrix method of constructing scenarios.

There are a number of advantages to building scenarios on a matrix. Firstly, using a matrix assures that scenarios are qualitatively different in a logical, non-random way. Secondly, a matrix assures that the top scoring key factors will be drivers in all the scenarios (Kaivo-oja, 2001 p.45).

The fixed matrix method has the benefit of being easily understood at all stages by non-experts and appears to have potential for use in less complex situations. Ease of understanding is important for methods in personal futures that will, at least to some extent, be conducted by individuals with no previous training in Foresight and Futures Studies. As discussed above, this method utilizes a scenario matrix based on four possible futures. The Institute for Alternative Futures recommends four alternative scenarios because:

With only two scenarios, too many possibilities remain unexplored. Three scenarios make a workable set but people are often tempted to focus on the 'moderate middle' scenario and pay less attention to the others. But a set of four scenarios has no middle, and four is the maximum number that groups can easily discuss (Bezold, Peck & Olson 1998).

Schwartz (1991) does not recommend a specific number of scenarios in a set, but says "Beware of ending up with three scenarios, though in practice we often do" (p. 247).

Inayatullah (Slaughter & Inayatullah 2000) also suggests four scenarios, but with a slightly different approach based on life in the "third world" and with the understanding that scenarios are not necessarily "perfect places, but rather possible places" (no p.)

- Status Quo (Dual society where one part grows and one part stagnates)
- Collapse (Natural disaster, war or other calamity)
- Return (Return to a previous time, when things were more predictable)
- Transformation (For a third world country, joining the first world)

An important accepted standard for scenarios is that each scenario be plausible and that each scenario in a set of scenarios be consistent with the set's underlying assumptions.

For purposes of this research and projected application to personal futures, the fixed matrix system of four standardized scenario types is proposed, as this method has been demonstrated to be useful to business people with little or no futures training (Bezold, 1998) and to meet the recommendations of several practitioners and authors. In the following example of a matrix worksheet for developing scenarios, the four scenario types are described as:

- **Expected future-** an extension of the present into the future, the future we expect as normal.
- **Best plausible future-** assumes that when a driving force is extrapolated into the future, the best projected outcome prevails

- **Wild Card future-** A future that is outside the projections or extrapolation areas. Usually a high impact event of low probability must occur.
- **Worst plausible future-** assumes that when a driving force is extrapolated into the future, the worst projected outcome prevails

Once the components of each scenario have been established a narrative can be written for each of the four plausible futures. The length and detail of each scenario is at the discretion of the writer, and may be as brief or as long and as stark or imaginative, as the writer chooses, but an important characteristic of the finished scenarios is internal consistency (Chermack Lynham & Ruona 2001) of the driving forces and events selected for the scenario. Although each individual will have to make choices about how to write the scenario, the actual construction and writing of a narrative is a step toward understanding a plausible future. If the scenario is constructed as a plausible, coherent narrative, the construction process itself should conjure images of the future that will enhance not only the scenario building process, but also the learning process for the individual (Steen 2005).

The scenario methods discussed here focus on constructing plausible futures and exploring possibilities within those futures. Scenario development does not consider how to achieve, avoid or prepare for these possible futures. For that reason, scenario development is sometimes conducted in conjunction with another futures method, strategic planning, which develops visions, strategies and plans for the future.

#### **2.4.4 Strategic Planning**

Strategic planning literature can be divided into three main categories:

- Processes, methods, tools and techniques for conducting strategic planning
- Strategic thinking and learning
- Strategy as practice and theories of strategic management

The largest apparent category of strategic planning literature is devoted to processes for conducting strategic planning, and within that category the largest portion of the literature is aimed at business, with a number of variations designed for non-profits, government organizations, educational system and others.

##### **A brief history**

Concepts of strategy have military roots (Lerner, 1999) that are found in mythology (Mack, 1995), history and even current dictionaries (Agnes, 2000). Peter Drucker, (1964), writing about strategy and its relationship to risk said, "To try to make the future happen is risky; but it is a rational activity" (p.173). He spoke further about risk as it relates to strategy describing four kinds of risks.

- The risk one must accept, the risk that is built into the nature of the business
- The risk one can afford to take
- The risk one cannot afford to take
- The risk one cannot afford not to take (p.206).

Strategic planning was popular in business in the 1960s when Igor Ansoff (1965) put forward the concept of gap analysis along with internal and external analysis (SWOT)

in models that are still incorporated in strategic planning. Ansoff also described values of organizational synergy, which he termed “the 2+2=5 effect” (p. 75). But in *The Rise and Fall of Strategic Planning*, Mintzberg (1994) decried that strategic planning in many organizations had become entirely about analysis and planning, not strategy, and submitted that successful strategies are visions, not plans. Bearing out Mintzberg’s assertions is a 1989 article (Webster, Reif and Walker) listing thirty “Strategic Planning Tools and Techniques” (p.8), one of which relates to scenarios, but none relating to vision. A few writers, including Taylor (1991) and Zeigler (1991), had built a base of literature about strategic visions and some writers were already advocating the inclusion of envisioning in the strategic planning process (Goodstein, Nolan and Pfeiffer 1992). Senge’s (1990) *The Fifth Discipline* discussed the values of a shared or collective vision, systems thinking and learning organizations and Schwartz’s (1991) *Art of the Long View* described the use of scenarios in long range planning.

The concepts of strategic thinking and learning combined with Mintzberg’s (1994) criticisms appear to have changed views of strategic planning in several ways, but the concept of a learning organization moved much of strategic planning from an annual or less frequent planning event to an ongoing learning process. Redding & Castellanello (1994) write, “... interest in learning organizations was ignited by the publication of Peter Senge’s *The Fifth Discipline* (p.xi)” and Senge in turn credits teachings in systems concepts by Jay Forrester at M.I.T. as fundamental to his own work. In addition to the learning concepts, Senge (Senge et al.1990), Redding and Castellanello (1994) and others advocated “scenario planning” based on the Royal Dutch/Shell model described by Schwartz (1991).

Whether termed strategic planning, strategic management or scenario planning, organizations continue to create strategic plans. A Google search for “strategic planning” in October of 2004 yielded over 6,520,000 returns, including numerous offers for software to assist in the creation of strategic plans. A similar search for “scenario planning” returned 1,390,000 pages.

## **Strategic management**

At the same time that much of strategic planning took a turn toward the future, a sizeable group, possibly motivated by Mintzberg’s book (1994) and other thoughts such as “...it is important to note at the outset that it is *individuals* who think strategically, not organizations” (Liedtka, 1998), turned in a different direction to study strategic management, at least in part with a hope of developing theories about strategy. In Europe, the strategic management group also appears to be motivated to create a European approach and identity to strategy. McKiernan and Carter (2004) probably expressed the frustrations of many in this in a recent editorial;

Strategic management should have grown up by now. Yet its protracted history, through the planning, learning, positioning and resource based paradigms has, after four decades, left it groping out of adolescence for direction, role, respect and contribution. (p.3)

Yet these words were an introduction to a collection of articles about strategy as practice and possible directions for theory. Whittington (2004), for example proposed to “...draw on the sociology of the elites to understand who gets the power to do

strategy” (p.64) and to apply social theory to other areas of strategy. Fiegenbaum and Thomas (2004) created a model integrating the “...concepts of risk management and competitive advantage”, followed by ten propositions related to risk and competition. Chia (2004) explored the influence of “habitus”, which might translate as experience and skill in a given environment that replaces ‘...conscious planning and deliberate action” (p.31). Chia goes on to compare the strategic games of chess and go as representative of linear and mission led (chess) strategy as opposed to open and opportunity seeking (go) strategy. In sum, these researchers offer an intriguing view of the state of theory development in the field of strategy as practice that may influence management in the future.

Clegg, Carter and Kornberger (2004) take a critical position with regards to strategic management and strategic planning, at times approaching sarcasm, as they view the subject from what appears to be a base of worst examples. Citing the “Cartesian origins” of strategy, the authors list seven fallacies or gaps of strategic planning

- (i) the gap between managerial fantasy and organizational capabilities; (ii) the gap between actual, clear goals and possible, unpredictable futures; (iii) the gap between planning and implementing; (iv) the gap between planned change and emerging evolution; (v) the gap between means and ends; (vi) the gap between a planning head (management) and a planned body (organization); and finally, (vii) the gap between order and disorder (p. 22).

The authors state that “Power is central to organizational life and underpins the strategy making process” and “All elite’s tend toward ossification... and becomes vulnerable to the veritable seduction of their own power and strategies” (p.25). These and other statements appear to represent a less than objective point of view. A more reasonable approach might be found in a recent article quoting Henry Mintzberg (De Holan & Mintzberg 2004) as saying,

I believe that strategy is simply putting things together in your head, making sense of things in a meaningful way. When we reify strategy it suddenly becomes this Big Thing, and strategy is a sense of where you are going, what direction you and your organization are taking. Strategy is a sense to move your organization forward, it is not this mysterious thing removed from practice (p.207).

## **Strategic thinking and planning**

Futurists approach strategic planning from a different point of view than traditional business planners, incorporating strategic thinking, systems thinking and futures perspectives. Consequently, as used throughout this thesis, the term strategic planning includes strategic thinking as part of the planning process. Scenario development, discussed in the previous section as a separate method, is considered here to be directly related to the strategic planning process, providing views of plausible alternative futures for which strategies can be developed. Creating a desired vision of the future for an organization, described in this section, provides another futures component, which gives a sense of direction to the organization’s strategies as urged by Mintzberg (1994).

This section will discuss strategic planning literature that relates specifically to business and other organizations with the intent of scaling and applying these concepts to individual lives, where small strategies may help careers, finances, health

and social relations. For example, an individual strategy of "Avoiding disease" (Rowe and Kahn 1998 p.39) appears simple, low risk and obvious, but when adopted as a personal strategy may change the quality and length of an individual's life. Making plans to save money to pay for college or to fund retirement are also strategies, no matter how simple or complex the plans may be, that support individual visions of the future.

An important and broadly accepted method, strategic planning has been effectively applied to business (Goodstein, Nolan & Pfeiffer 1992), government (Bezold, Peck and Olson 1998), non-profit organizations, (Barry, 1997), schools (McCune, 1986) and other organizations (United Way of America, 1992). The concepts underlying strategic planning appear to be appropriate to personal futures, as many of the techniques that are a part of the strategic planning process can be effectively applied to planning for individual futures. Setting goals or creating a vision (Nanus, 1995), long range planning, anticipation of and preparation for change (McCune, 1986), (Kotter, 1996) and (Tough, 1982) all appear to be as applicable to individuals as to organizations. Whether for a business or for an individual, the challenge "is to recognize and react to environmental change before the pain of a crisis" (De Geus, 1988). This process of anticipating and reacting to change while following a vision is analogous to tacking a sailboat while maintaining a course.

For business, an important function of the strategic plan is to communicate the vision (Mintzberg, 1994) and direction of the organization to employees, shareholders and other stakeholders in order to have everyone aligned and progressing in the same direction. Chia (2004) describes this function as linear, rational, focused and mission led. The other side of strategic planning according to Chia is "open, pragmatic, dispersive and opportunity seeking" (p.33). This second side of strategy, or strategy-in-practice, is comparable to guerrilla warfare and places greater emphasis on the individual skills and experience of practitioners than the collective abilities of organizations. Futurists could argue that scenarios address both types of strategy and prepare the organization to deal with the known and the unknown, the probable and the improbable.

Although there is a sizeable variety of tools and techniques, Webster, Reif and Bracker (1989) list thirty examples, used in the development of strategic plans, there are a number of tools or methods that are commonly included in the process. Lerner (1999), writing about strategic planning for universities, states, "...every successful 'model' includes most of these steps" (p.8).

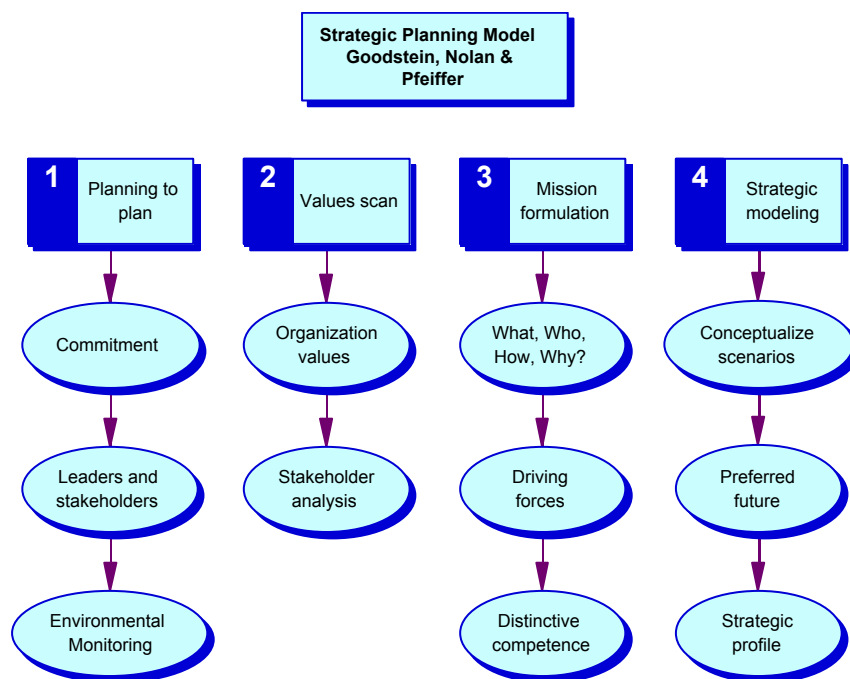
- Vision and mission
- Environmental scan
- Gap analysis
- Benchmarking
- Strategic issues
- Strategic programming
- Emergent strategies
- Evaluation of strategy
- Review of the strategic plan
- Strategic thinking

Rubenstein (2000), a business consultant, suggests a different list of tools and emphasizes that they "...should be deployed in the following order:

- Gap analysis
- Root Cause and Defining Moments Analysis
- Competitive Analysis
- Porter's five Competitive Forces plus Grundy's Industry Mindset
- Flexibility/Innovation Analysis
- Political, Economic, Social and Technological Forces Analysis
- Stakeholder Analysis
- Growth Drivers Analysis
- Scenario Planning and Visualization
- Strengths, Weaknesses, Opportunities and Threats Analysis (p. 6).

Lists and models of strategic planning are abundant and varied, and may be instructive both in their similarities and their diversity. One author (McNamara, 1999) described five distinct models, and suggesting that there is no universal model that will fit all situations. The following two models illustrate that point. The first, (Goodstein, Nolan & Pfeiffer 1992) is a business model and was selected because the model included three components that are basic to Foresight and Futures Studies:

- Environmental scanning
- A vision of the future
- Scenario development



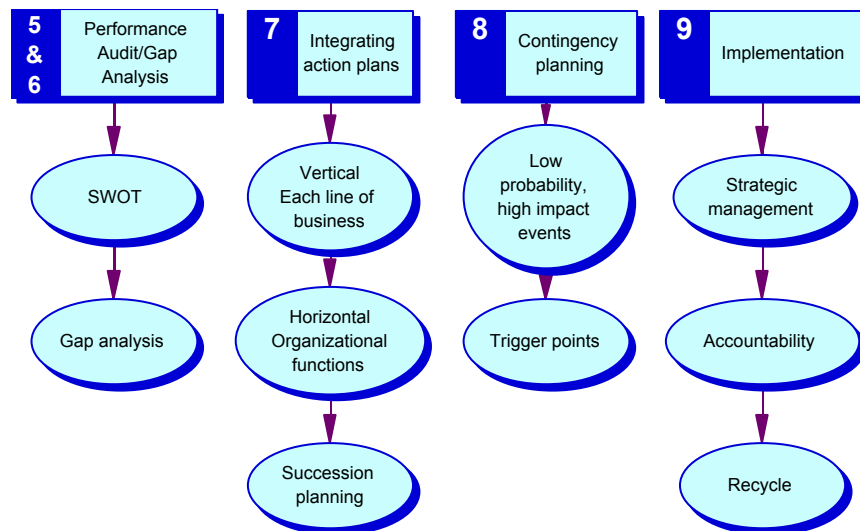


Figure 2.5 A strategic planning model based on Goodstein, Nolan and Pfeiffer (1992). Although this model illustrates nine stages in the strategic planning process, each stage incorporates multiple tools or techniques, any of which may become a sizeable project within the strategic planning process.

The second model, (Morrisey, 1992) is a personal model of strategic planning for professionals and is considered important here because it demonstrates that the strategic planning concepts and techniques are scalable and appropriate to individuals.

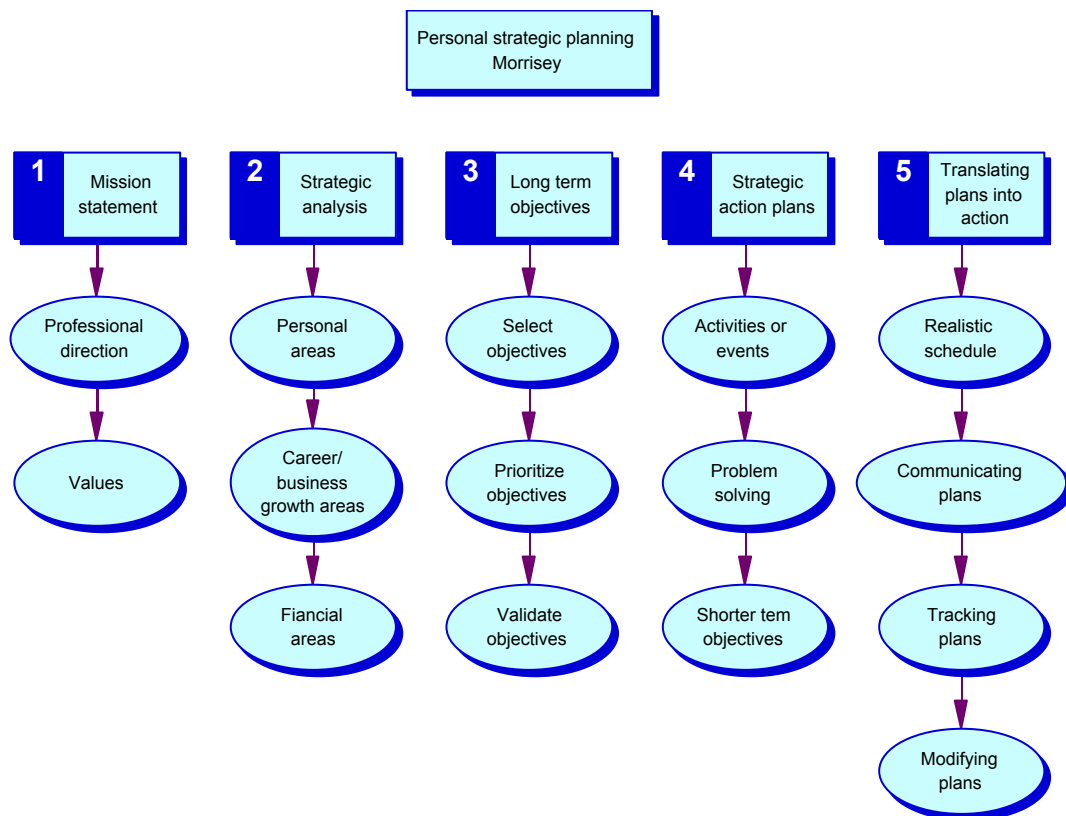


Figure 2.6- A personal strategic planning model based on Morrisey (1992).



Morrissey's (1992) personal strategic planning model consists of only five stages and the components of each stage are designed to be within the capability of individuals.

The variety of models, lists and tools makes clear that strategic planning is not a single method or set of tools, but a variety of methods and tools that can be adapted to different organizations and situations. What these different approaches have in common is that the primary value of strategic planning lies in the identification of strategies to deal with whatever the future may hold. The purpose of a strategic plan then, whether for business, government or an individual, is to provide flexible paths and strategies to the future along with a clear vision of the intended future direction of the person or organization. This would suggest that a strategic plan should include the following components

- An understanding of the past and present
- An understanding of plausible futures and probabilities
- A vision of a desirable future
- Strategies to achieve or deal with those futures
- A plan for implementing the strategies.

The concepts underlying strategic planning appear to be appropriate to personal futures, as many of the techniques that are a part of the strategic planning process can be effectively applied to planning for individual futures.

### **Applying strategic planning to individuals**

Although most of the strategic planning literature focuses on business applications, Morrissey (1992) has introduced a variation of strategic planning that is specifically designed for use by individuals. Morrissey's approach relates largely to career planning and professional development, but he demonstrates the values of strategic planning for individuals and introduces codification, as suggested by Bell (1997) as an appropriate technique for putting futures methods into formats that can be utilized by individuals. Strategic planning is discussed here in order to expand upon Morrissey and to explore the concepts of the method broadly.

For individuals, strategic planning has few concerns for the complexity due to size and cooperation that is found in organizations (Markley 1998), because the individual is the decision maker, and the key stakeholders in that individual's future will probably consist of only a few people, primarily family. A different issue for individuals is time, and although organizations can spend great amounts of time developing a strategic plan, individuals are unlikely to spend a great amount of time on a personal strategic plan. As a consequence, it should be recognized that strategic planning for individuals is neither strategic management nor strategic planning for organizations, but is a unique synthesis and distillation of concepts borrowed from those methods and adapted to individuals.

The research problem recognized that complexity is a barrier to the study or exploration of personal futures. With that in mind, the selection of futures methods considered first, the demonstrated value of a method, then the complexity or ease of use of that method. Two comprehensive methods employed by futurists, scenario development and strategic planning, were selected to be adapted for constructing

personal futures. Both scenario development and strategic planning are well-tested and respected stand-alone futures methods, but with different approaches. Scenario development explores plausible futures and reveals possibilities and probabilities. Strategic planning prepares for those futures and identifies strategies and actions for achieving desirable futures and avoiding or minimizing the impacts of undesirable futures. Although some writers, including Goodstein, Nolan and Pfeiffer (1992), incorporate scenario development as a step within the strategic planning process, others, including Morrissey (1992) do not. The approach taken here is to give each method equal weight as a stand-alone method, then let the scenarios drive the strategic planning process.

## A proposed approach to personal strategic planning

In the context of personal futures, and in the balance of this thesis, the term strategic planning will comprise four primary components:

1. A vision of the future that provides direction for the individual's life and incorporates the individual's desires, ambitions and values.
2. Strategies for the future that will:
  - a. Achieve the vision and goals that the individual has identified.
  - b. Deal with the unexpected or undesirable future events or scenarios.
- 3- Action plans based on the strategies above
- 4- Implementation: live the plan, with regular reviews and updates

Diagrammed below is a proposed model for personal strategic planning.

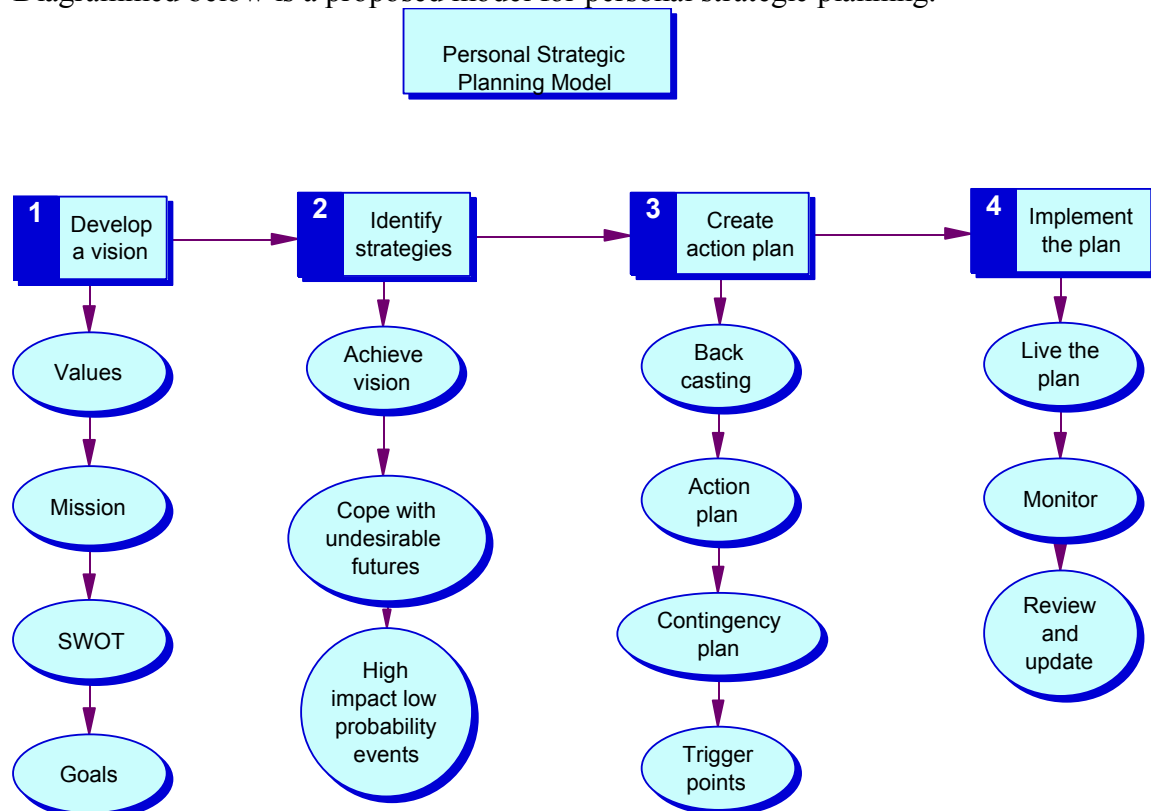


Figure 2.7 Proposed model for personal strategic planning.

This approach captures the essential steps of strategic planning while reducing complexity, yet scaling each component in the process to the personal or individual level.

### 2.4.5 Futures Workshops

Robert Jungk conducted the first futures workshop in 1962,

*...in the conviction that it could help tap the biggest and most neglected resource of them all: people's imaginations (Jungk & Mullert 1996 p. 5).*

These early workshops were organized with the intent of bringing common people together to understand and deal with community problems, giving people a say in their community's future (Jungk, 1976). A format for the workshops evolved into a preparatory phase and three workshop phases for one-day or weekend workshops:

- **Preparatory phase**

Includes the selection of a topic, arranging for a meeting place, announcing the event or inviting participants and organizing materials and amenities.

- **Critique phase**

A discussion of the problem during which 'all grievances and negative experiences relating to the chosen problem are brought into the open'

- **Fantasy phase**

'...in which the participants come up with ideas in response to the problem, add with their desires, fantasies and alternative views.'

- **Implementation phase**

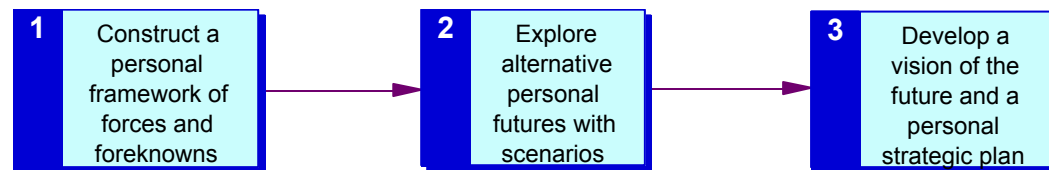
'At this stage the participants critically assess the chances of getting their projects implemented, identifying the obstacles and imaginatively seeking ways around them to draw up a plan of action.' (Jungk & Mullert 1996 pp.11-12)

Dator (1993) has also used future workshops, but with a "wide variety of existing groups, such as the Girl Scouts, the YMCA, the YWCA, credit union leagues, several different organizations..." (p. 3) to help those groups explore alternative futures for their organizations. In Dator's workshops, an exercise is added to the critique phase, in which participants explore driving forces that are affecting the organization. Participants are then divided into groups to consider and discuss "one of (say) four very different futures" (p.6). In what Jungk calls the Fantasy phase, Dator's groups "have an opportunity to envision preferred futures; to brainstorm as wildly as you wish about what you would like the future to be" (p. 6).

Futures workshops, whether considered a method or simply a technique, are included here among methods because workshops may be an effective approach to helping groups of individuals learn about alternative personal futures.

## 2.5 Chapter Conclusion

This chapter has provided a background for the investigation, introducing the parent discipline, Foresight and Futures Studies, as well as the immediate field of interest, personal futures. Futures methods were also introduced, first as an overview, then in a discussion of methods that might be suitable to achieve the needs of individuals studying their personal futures. A proposed model for personal futures included three components; personal research, scenario development to explore the future and personal strategic planning to prepare for the future.



*Figure 2.8 A proposed model or procedure for conducting personal futures.*

The model illustrates the proposed steps in a personal futures process discussed in this chapter and in following chapters. The personal framework provides the basis for creating personal scenarios, which in turn become a basis for developing strategies and plans for the future. These concepts and relationships will be discussed more fully in following chapters. This chapter also suggested that futures workshops offer one approach to helping individuals develop their personal futures.

With the foundation of Foresight and Futures Studies established and a process described for conducting personal futures, the next step in the thesis development was to begin basic research to identify the existing barriers to personal research and to search out alternate approaches that reduce the complexity of the futuring process. The next chapter describes the methodology and methods employed in this research, the specific steps taken in the methods and ethical considerations of the research.

## 3.0 Methodology

### 3.1 Introduction

This chapter will introduce and justify the research methodology, grounded theory, then describe and justify each of the methods selected to collect data in the conduct of the research. The processes for the collection of data are described in detail for each method, leaving a clear track that future researchers can follow easily. The chapter concludes with a discussion of ethical considerations

### 3.2 Methodology and selected methods

The research began as an exploration, with no hypotheses but only questions. Attempts to find answers in the literature raised more questions and disclosed apparent gaps. Early inquiry, including informal interviews and observation, suggested direction but offered no hypotheses. Clearly, traditional positivist approaches to the research were not moving the research forward. At this point, an exploration of qualitative methods disclosed the methodology of emergent concepts and theory, grounded theory.

Grounded theory was selected as the methodology under which concepts for this research were developed and research was conducted. In each case, concepts were developed from the data derived from observation, unstructured interviews, surveys, field research and focus groups, then supplemented and guided by the literature.. Later in the research, data was collected to reinforce or challenge earlier findings, in effect triangulating with earlier data to confirm or refine concepts. As a consequence, this research “begins at the empirical level and ends at the conceptual level.” (Bailey, 1994 p.55).

Glaser and Strauss introduced grounded theory as a qualitative methodology in their book *The Discovery of Grounded Theory* (Glaser & Strauss 1967), which was subsequently updated and supplemented by both authors writing separately. Since that time, grounded theory has been both assailed as “a return to ‘Baconian’ inductivism” as well as acclaimed as “the most comprehensive qualitative research methodology available” (Haig, p.1). Glaser and Strauss (1967) argue persuasively for the methodology, stating that most importantly, “it works—provides us with relevant predictions, explanations, interpretations and applications” (p.i). Glaser and Strauss argue further that

Theory based on data can usually not be completely refuted by more data or replaced by another theory. Since it is too intimately linked to the data, it is destined to last despite its inevitable modification and reformation (p. 4).

Glaser and Strauss introduced grounded theory together in 1967, but their approaches to the subject later diverged. Glaser tended to defend and expand upon the original concepts while Strauss, writing with Corbin (1990) and (1994), moved his approach to grounded theory in a new direction. Specifically, Strauss became “...relatively

more concerned with producing a detailed description of the cultural scene” and appears to move toward a more traditional quantitative approach by emphasizing the importance of “replicability, generalizability, precision, significance and verification.” (Babchuck, p.3).

It is noteworthy that one outcome of the debate about Glaser versus Strauss is that these two men created a substantial body of work supporting grounded theory as a qualitative methodology. In addition to their original book *The Discovery of Grounded Theory* (1967), Strauss authored three books with Juliet Corbin (Strauss and Corbin, 1990, 1997 and 1998), and one alone (1987), all devoted to grounded theory. Glaser responded to the first Strauss and Corbin text with a book (1992) challenging the interpretations and methods suggested by Strauss and Corbin and accusing them of forcing the data. Subsequently, Glaser has written a number of books detailing grounded theory methods and supporting grounded theory as a methodology. In the second edition of Strauss and Corbin’s Basics of Quantitative Research (1998) the authors acknowledge and respond to some of Glaser’s criticisms of the first edition with a well-written, well-organized textbook that provides the reader details of how to conduct grounded theory research.

Glaser, on the other hand offers a self published (Glaser, 1998) book that appears to have been dictated (or transcribed from lectures), but not proofread before publication. The book has weak organization and is full of spelling and grammatical errors that most readers will find distracting and sometimes confusing. Glaser tends to be dogmatic in his presentation, and a little out of step with the times; opposing computer records and insisting that researchers hand write note cards. Yet, despite his style, Glaser remains true to his theoretical roots and presents a pure and fundamental approach to grounded theory, but the reader must sift through carefully and work around Glaser’s presentation to learn how to actually conduct grounded theory research to meet Glaser’s standards. An important value of Glaser’s approach is that he places responsibility on the researcher to use good judgment. Where Glaser offers a methodology based on concepts and theory, Strauss and Corbin offer the researcher a defined structure and controlled process.

The fact that the two authors disagreed or took different approaches to grounded theory created an opening for controversy among scholars such as Babchuck (1996), Dick (2002) and Haig (1995), to list just a few. Those debates were echoed in theses, term papers and publications around the world. Despite the controversy among scholars, Strauss and Glaser appear to have maintained a relationship until Anselm Strauss died in 1996. In his book *Doing Grounded Theory* (1998), Glaser mentions “being a very close friend of Anselm” and speaking to Strauss on the phone “constantly, right up to within a few days” (p. 36) before Strauss’ death. The dedication page (vii) opens with the following:

For Anselm L. Strauss  
in remembrance of the journey  
we started together in 1967

Barney Glaser continues to speak out in support of grounded theory on his web site, his seminars and speeches. His web site supports a number of forums that discuss details of grounded theory methods and Glaser has formed a publishing company,

Sociology Press, to publish and promote his books. As a result of the efforts of Glaser, Strauss, Corbin and their many followers, grounded theory is now recognized as a viable qualitative methodology around the world.

This research conforms to the principles of emergent theory and employs the methods described in the original Glaser and Strauss book *The Discovery of Grounded Theory* (1967) and as updated in Glaser's more recent book *Doing Grounded Theory* (1998).

### Methods

Several exploratory qualitative methods were employed in this research including:

- Interviews
- Observation
- Surveys
- Document study
- Field research
- Focus groups

Which raises the question, why these particular methods? Reasons for selecting each of the methods used in this thesis are explained in the following table.

	<b>Brief description</b>	<b>Reason method was selected</b>
<b>Interviews</b>	Individual interviews, conversations and case studies	Interviews start with the individual, allowing each person to discuss their interests or concerns about a variety of topics. Allows individuals to determine and express what is important to them.
<b>Participant Observation and Observation</b>	Observed individuals and groups in their own environments, usually as a participant	Observation methods study both individual and group interaction and behavior in everyday settings.

<b>Surveys</b>	Mail surveys to elders, both volunteers and a randomly selected sample	Surveys gathered data from a large number of people who answered specific questions. Used in this thesis to (1) determine acceptability of a concept about life stages; (2) learn about preferences for caregivers and care locations; and (3) obtain lists of important life events after age sixty.
<b>Document study</b>	Studied a variety of documents including legal forms, regulations, contracts, brochures and other documents	Document studies obtained data from diverse types of documents that impact individual's lives, whether through regulation, legal protection, contracts, insurance and services
<b>Field research</b>	Primarily related to visits to medical and health care facilities	Field research, narrowly defined here, was used to observe the many types of medical and care facilities utilized by people of all ages, but more heavily by older people.
<b>Focus groups</b>	Discussed concepts raised in the research to obtain reactions and opinions of different groups	Focus groups, broadly defined here, keep a researcher in touch with reality by involving various groups of people in discussions that provide feedback about concepts raised in the course of the research

*Figure 3.1 Methods used during the research with a brief description of the method and an explanation as to why this method was included.*

The methodological emphasis throughout this research was exploratory, always seeking additional data to learn what was happening in peoples lives, searching for the common elements and identifying the potential foreknowns in people's lives.

Interviews were conducted with a wide variety of individuals; mostly over age sixty in the initial stages of the research as the early emphasis of the research was related to understanding life stages after sixty. Later, interviewing was expanded to include people of all ages, including children. Experts in several fields were consulted or interviewed for their opinions or suggestions for the research. The experts included more than a dozen academic or professional futurists, as the research was from the beginning about futures research. A number of medical doctors including geriatricians, general practitioners and specialists were interviewed.. In addition, following Glaser's (1998) admonition that the "researcher can interview himself," (p. 120) personal experience was brought in for comparison with interview results. More than twenty of the interviews with individuals developed into case studies that spanned several years, lending a longitudinal aspect to the research. References for



interview research included Glaser & Strauss (1967), Bailey (1994), Babbie (1995) and others

Observation of individual lives, civic and professional organizations, community life and life in other parts of the world provided considerable data for the research and provided perspective for the individual interviews. References for observation research included Bailey (1994), Babbie (1995) and others.

Surveys were conducted which provided substantial pertinent data about life after age sixty. Open-ended questions were most revealing and a question about life stages provided confidence that the research was developing realistic concepts. References for the survey research included Babbie (1990), Salant and Dillman (1994) and others.

Document studies covered a variety of documents including contracts, proposals, statistics, abstracts, short biographies and others, each introducing new data and a unique dimension to the research. References for document studies included Glaser & Strauss (1967), Bailey (1994), Babbie (1995) and others.

Field research was conducted to learn about organizations, institutions and facilities, largely those related to ageing, as the understanding of life stages after sixty required some knowledge of the institutions that are an important part of aging. The term “field research” is commonly applied on a broad basis to include many of the methods described or applied in this research.

Focus groups allowed group discussion and interaction about facets of life and about some of the research findings and concepts. In addition, focus groups provided an opportunity to test concepts and applications of personal futures methods and obtain direct feedback. The term “focus group” is used here in the sense of a “guided group discussion” while recognizing that the information or data gathered is qualitative and may not be generalizable (Bailey, 1994).

### **3.3 Research procedures**

This section details each method that was employed in the research, describing procedures and processes that led to the production of data and to the development of concepts. The results of each method are described in the next chapter in parallel section numbers. For example, in this chapter interview procedures are described in section 3.3.1, and the results from those interviews are described in section 4.3.1.

#### **Preliminary research**

The preliminary research began in 1999 and was aimed generally at understanding life stages and aging in preparation for creating a research proposal. Although the preliminary research began with computer searches on the Internet and library searches for pertinent literature, conversations with friends and acquaintances and observations of life in a community populated primarily by retired persons began shaping the direction of the research. At the time the research proposal was submitted and approved, considerable data had been accumulated. The process of collecting data from multiple sources continued throughout the research and liberally applied Glaser’s (1998) admonitions that “All is data” (p 8). Subscriptions to geriatric, gerontological, sociological, and futures journals provided a steady stream of current

information and new data. Growth of the Internet and improvements in searching capability yielded new data for keyword searches. Newspapers, magazines and television offered data and suggested original sources. Conversations with new acquaintances became informal and unstructured interviews, adding more data.

This process of gathering, sorting, comparing and categorizing data as described by Glaser and Strauss (1967) and further in Glaser (1998) began in the earliest stages of the preliminary research and continued through the final draft of this thesis.

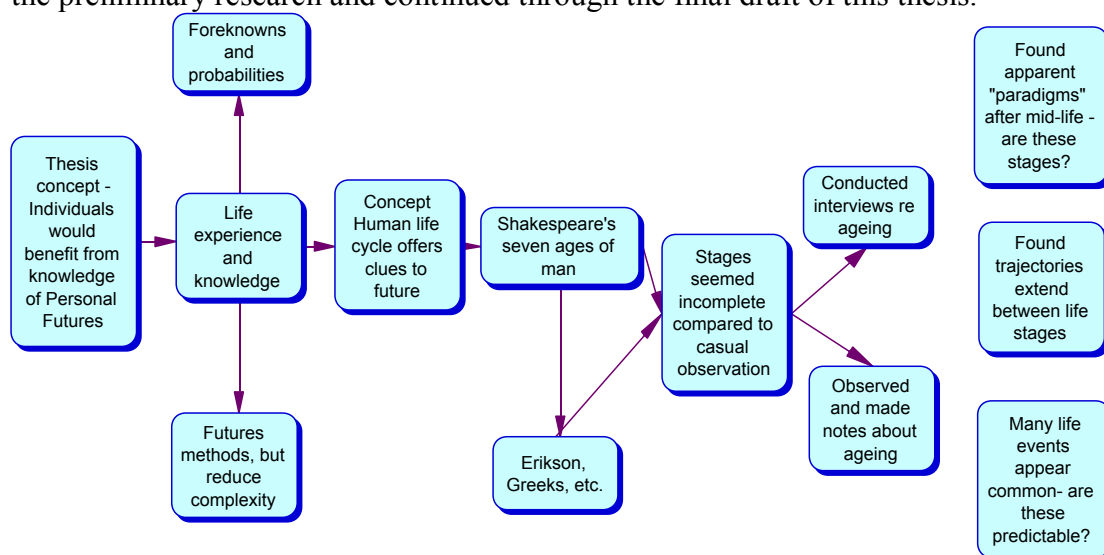


Figure 3.2 Diagram of the research process that led to the emergence of three core categories.

The above diagram (3.2) illustrates the process that led to the emergence of three core categories. In the state shown here, the core categories were just emerging and being recognized. The categories suggested new questions for the research, which developed new data that eventually filled out and saturated the core categories.

### 3.3.1 Interview procedures

Interviews were generally informal, unstructured and unrecorded. The notes for interviews were made after the interviews. More than thirty individuals participated in multiple interviews over several years, and could be viewed as case histories. Subjects of all interviews were aware that I was conducting research and each had consented to being interviewed.

In many cases an interview would centre around one topic such as dealing with recovery from a stroke or cancer, but in nearly all cases other factors in the subject's life, such as relationships with family members or the impacts of the condition on finances and activities would come into the conversation. Each event that was discussed was noted as data and each interview included multiple events. Early in the research, an interview protocol was created, and was useful because it provided questions that could be asked when the interviewee needed a topic, but Glaser (1992) insisted that interviewers should ask only neutral questions about the chief concern of the interviewee, and the best interviews were those that centred on what the interviewee wanted to discuss, the things that were important in his or her life. With

older people, any query about retirement, health, grandchildren or travel would start an interesting discussion. For professionals, a rewarding interview would usually result from asking what changes could be expected in that profession in the next five or ten years. The initial interviews were primarily with people over age sixty, but interviews were expanded to include all ages, including children and adolescents.

Allowing the interviewee to talk about what was important in his or her life frequently introduced topics that might otherwise have never come up, simply because the topic did not occur to the researcher. In this way, it was possible to guide the interview to general areas without restricting the interview to specific questions. This approach required more interviews, more notes, more time and more work for the researcher, but yielded a broad understanding of issues that were important to the interviewee, which is what grounded theory is about, letting ideas and concepts emerge from the data.

Interviews ranged from one time, opportunity conversations to multiple interviews over time combined with observation and in some cases document research. One interview/case history, for example, took place over a period of three years and combined observations with the interview. The following provides an example from memos and notes following interviews and observations of one woman.

**Observation:** Observed an older woman in the cul-de-sac supported by a walker. She was wearing a bathrobe and slippers and had no hair presumably lost to chemotherapy.

**Interview:** Met N----, who said she had indeed survived a bout with cancer. She and her husband had both gone to a nursing home after treatment for cancer and neither was expected to live. The husband died but N---- survived and was now staying with her son, his wife and three grandchildren. She had completed chemotherapy and was beginning recovery.

**Observation:** Over the following months, N---- grew stronger and walked in the neighbourhood regularly. Her hair began to grow out, first soft and fuzzy, then as it grew longer she added a red tint. As she grew stronger and as her hair grew, N----'s spirits improved and she became more outgoing.

**Interview:** N---- said she came to Harlingen as a war bride from Scotland after World War II. She and her husband had a home with some acreage, where they raised their children. They had been frugal their entire lives, saving for their children and then for their own retirement. N---- was now in her mid-sixties. Living with her son and his family, she said she had taken over some of the responsibility for the household and the grandchildren while both parents worked. During this time she sold her family home and land. N---- planned a trip to Scotland to visit her mother and relatives, possibly for the last time. She planned to stay for a matter of months, travelling Scotland, the UK and Europe, and was excited that she was going to fly first-class for the first time in her life.

**Observation:** while still planning her trip to Scotland, N---- purchased a new car, a bright red sports coupe. The red coupe was seen frequently in the neighbourhood and the community, and N---- was seen occasionally in restaurants or shopping with her granddaughter or a friend. She appeared to be getting a great deal of joy out of life.

**Interview:** N---- returned from her trip to Scotland after about two months. She said she had enjoyed a wonderful time but had experienced stomach pains and was hospitalized for pneumonia while she was there, so had returned to see her doctors here. She suspected that the cancer had returned. She was planning to fly to California to visit her daughter and the daughter's family. She said she now felt she had stayed long enough in her son's home and was looking for a house or condominium in the neighbourhood. Subsequently she purchased a two-story townhouse about half a mile from her son's home, and seemed excited about having her own place, redecorating and furnishing.

**Observation:** after N---- moved to her town-home we still saw the red coupe frequently but later heard she was ill. We occasionally left notes or flowers and my wife talked to N---- on the phone from time to time. She now had a nurse-caregiver with her most of the time. Later we learned that N---- had died.

From this single interview/case history, a number of life events were identified. An abbreviated list includes:

- Walker (using)
- Chemotherapy
- Cancer
- Nursing home
- Not expected to live (terminal)
- Husband died
- Survived (cancer)
- Living with son
- Life lived frugal, saving
- Retirement
- Trip, fly
- Spend on herself
- Independent, enjoying life
- New car
- Restaurants
- Shopping
- Hospitalized
- Cancer returned
- House, condominium, town home
- Nurse, caregiver
- Died

Lists of life events from the interviews and case histories were compared and similar events grouped together. Later the lists of groups were compared and each group assigned to a category. Eventually the categories were narrowed to six.

Glaser's (1998) term for the items on this list drawn from the interview was "incidents." Each incident on the list was next labelled or coded to an initial category. For example:

Walker (using)	Assistive device
Chemotherapy	Medication, treatment
Cancer	Disease

Nursing home	Care, long term
Not expected to live	Terminal
Husband died	Death, spouse
Survived (cancer)	Disease (Change of life stage!)
Life lived frugal, saving	Personal finances
Retirement	Retirement
Trip, fly	Travel
Spending on self	Attitude change
Independent, enjoying life	Attitude and life stage
Living with son	Care, Family
Family	Family
Mother	Family
Children	Family
New car	Transportation
Restaurants	Social activities
Shopping	Social activities
Friend	Friends
Hospitalized	Medical care
Cancer returned	Disease
House, condominium, town home	Home
Nurse, caregiver	Care (Change of life stage)
Died	Death

Although categories were labels from the incidents, there were nearly as many labels as incidents, so each of the labels was compared to the others, combined where practical, and new, broader categories created, with the labels now identifying properties of the broader categories.

Assistive device	Transportation
Medication, treatment	Health
Disease	Health
Care, housing	Housing
Death of spouse	Social
Disease	Health
Personal finances	Finances
Retirement	Activities
Travel	Activities
Family	Social
Transportation	Transportation
Activities	Activities
Friends	Social
Medical care	Health
Disease	Health
Home	Housing
Care	Health

This consolidation reduced the number of categories to six, a more manageable group and within the range of five to ten categories recommended by Glaser (1998). The first group of categories, or labels, then became sub-categories of the final six.

- Activities

- Health
- Housing
- Finances
- Social
- Transportation

This technique of identifying incidents in the data, comparing the incidents, labelling the incidents, then comparing the labels and creating categories was described by Glaser and Strauss (1967) as the “constant comparative method” (p.105). In this method, the researcher compares “incidents compatible to each category” and integrates the categories and their properties. Glaser (1998) points out that with time, each of these categories will become saturated with data, at which point the emphasis shifts to studying the relationships between the categories rather than accumulating more repetitive data with a saturated category.

In this series of interviews with N----, a fact that was noted was that N---- had recovered from terminal cancer and returned to an active, independent life. Later she again went to the end of life stage and subsequently died. This suggests that N---- passed through several states, which might be coded as:

Healthy and independent

Sick with cancer and declared to be at the end of her life

(Once again) healthy and independent

(Once again) declared to be at the end of her life

From these briefly described states, it may be inferred that N---- experienced two different life stages. Her case was unusual, in that she experience both stages twice. She may have passed briefly through others states or stages, but that does not come out in the interview, so is not coded. These codes, when compared to codes in other interviews and observations, would place these descriptions into two categories or stages of life,

Independent stage

End-of-life stage.

This process of identifying incidents, collecting them into open coded descriptions then creating categories and sub categories is basic to the grounded theory process, and was repeated many times from interviews, observations, documents and literature. In this case, as N... described how greatly her life changed as she went from being healthy and independent to being very sick and expected to die, the concept began to emerge that each life stage begins and ends with substantial changes in the individual’s life.

This single personal history illustrates the steps from collecting data through building categories and on through the emergence of concepts. Additional interviews, when compared to this one either reinforced the categories and concepts, or raised warnings that had to be reconciled with additional data.

Some interviews were in fact casual conversations. For example, a series of casual conversations with “C...” over ten days on a cruise ship, though brief, revealed additional events.

**Interview:** C... said that he and his wife lived in a gated community in the foothills of the Sierra Mountains not far from San Francisco. He appeared to

be in his late sixties, and stated that he had built a substantial business in earlier years, sold the business and was now retired. Although C...’s wife did not ski because of a problem with one knee, C... stated, with apparent pride, that he skied fifty days each year. They both enjoyed travelling together.

**Observation:** Both C... and his wife appeared to be in good health, and enjoyed socializing and dining on the cruise ship. Both drank wine or mixed drinks when they were available, and he tended to become slightly belligerent when he was drinking. Neither smoked.

Again, life events were identified from this conversation/interview and compared to other lists. During a ten day period, over a dozen other casual interviews were noted, adding to the data on life events. Casual interviews continued through the completion of this thesis, saturating most categories, so were not recorded unless a new event or behaviour was noted and added to the data without recording the interview. The combination of the multi-year in depth interviews and brief casual interviews yielded a rich variety of events and general information about ageing and life stages.

These interviews were conducted with people of all ages, from children to nonagenarians, in several states in the U.S and in several other countries, including the United Kingdom, Spain, India, Peru, Chile and Argentina. Although religion was not often an interview topic, people from several different religious, ethnic and cultural backgrounds were interviewed. Economic and educational levels also varied substantially.

### **3.3.2 Observation**

As seen in the above section, observation was often combined with interviews to provide a more rounded picture. Initially this research was concerned primarily with people over age 60, trying to understand the stages and events in the lives of older people. Later in the research, observation was extended to all ages and to a number of different countries and cultures. Observation was conducted in homes, neighborhoods, public meetings, while traveling or engaged in activities as well as other settings. Further observation took place in hospitals, nursing homes, doctor’s offices, and other medical facilities as well as funeral homes. All observation was intended to study people in their natural environment. These observations took place over a period of more than five years, providing a longitudinal aspect to the research (Bailey, 1994).

Since the purpose of observation was simply to collect data, it was possible to observe people as a participant (Robson, 1994) both in small groups and large groups, yet to hold many conversations with individuals who provided greater detail about the lives of people of all ages. These observations provided considerable data that related to how people lived and how they dealt with the events that occurred in their lives. In many cases it was possible to pose a question in a conversation with a small group of people that would stimulate an in depth discussion involving the thoughts, opinions and memories of several people in various stages of life.

### **Observation procedures**

Observations were drawn from daily life and events that took place, primarily in and around Harlingen, Texas. As memos were written, notations were made of life events, behaviour patterns, trends, life stages and anything that appeared to be of interest.

Following is an example of a memo:

Harlingen, Texas is located near the Rio Grande River on the Southern border of the United States with Mexico. Each winter older people, mostly retired, from North Central states in the U.S. including Minnesota, Wisconsin, Michigan Iowa, Illinois and others travel to the Southern states to avoid the harsh winters. The population of Harlingen nearly doubles each winter.

A large percentage of these "Winter Texans" arrive in motor homes or travel trailers, usually called "RVs" (recreational vehicles). Others have mobile homes or permanent homes in the Harlingen area. As a consequence, there are a large number of RV and mobile home parks, most of which fill up during the winter. The atmosphere in these parks is very friendly and in some cases appears to be a winter-long party for older people. Activities are scheduled in the parks and at other facilities including dancing, dancing lessons, Spanish language lessons, golf, tennis and other tournaments and a variety of other events to keep the visitors entertained. Each week during the winter the local newspaper has a two page listing of activities scheduled for the week for the Winter Texans and local people who wish to attend.

A separate but related note:

Mexican border towns along the southern Rio Grande River, the international border, attract Winter Texans and resident seniors to a variety of attractions, including shopping for low priced souvenirs, but the major attractions for older people are prescription drugs and dental care. Both are offered substantially below the U.S. market prices.

Typically, people drive to the river, at an international bridge, park their cars in a parking lot on the U.S. side and pay a 25 cent toll to walk across the bridge to the Mexican side where they can shop, have dental work performed, get haircuts or enjoy inexpensive food, drinks and dancing. For people on Medicare (the U.S. national medical insurance plan for people over age 65), the savings on prescription drugs can be substantial. Many drugs for diseases and conditions that are common among older people cost hundreds of dollars each month, and many seniors take multiple medications.

When shopping is complete, the visitors pay 25 cents to walk back across the river and re-enter the United States through U.S. customs offices, where their purchases may be scrutinized, taxes are paid on cigarettes and alcoholic beverages and they return to their winter homes.

These two examples illustrate that observation of and participation in daily life can provide rich sources of data. Here the data included patterns of behavior, such as traveling to a warm climate for the winter and crossing international borders to buy less expensive prescription drugs. In addition, a number of activities (golf, tennis, dancing, language lessons and others) were observed.

This data was coded and compared with other data in the same manner as described in the section above on interviews. From the observation data, patterns emerged and categories of events and behaviors were created.

During a period of about thirty years prior to undertaking this research, I had traveled to approximately thirty different countries outside the United States. I had also



traveled within most of the states of the United States, including Alaska, Hawaii and Guam, a Territory of the United States. In several cases, I spent weeks or months within a country. During the period of the research, I traveled to at least six additional countries. This travel has given me the opportunity to observe a wide variety of cultures and some of the customs or ways of life that are different, or similar, between cultures. This experience of observation of a broad variety of cultures and people prior to this research provided a sound foundation for observations during the research.

### **3.3.3 Survey Research procedures**

In order to generate more original data and to answer some questions about life after sixty and specifically, about life stages, a decision was made to conduct some trial surveys and to conduct one survey of a systematic sample with a random start. Once the decision was made to conduct surveys, priority was given to establishing procedures for conducting the surveys that would yield professional quality results and conform to professional ethics. At the same time, this research was being conducted by one self-funded individual, which required budgetary restrictions.

#### **3.3.3.1 The Target Population and Sampling Frame**

The initial research dealt with life stages and specifically the life stages that might replace Erikson's eighth stage of life, "Old Age." To learn about this stage of life, it was determined that research would be conducted among people over age sixty, those who were already living in Erikson's eighth stage. A target population was identified that was readily accessible.

The target population (Babbie, 1995) and (Bailey, 1994) for this research was males and females, belonging to the age group older than the sixtieth birthday and members of Seniors' Choice in Harlingen, Texas, recognizing that "...a sample survey can provide information about the population that makes up the frame and no more (Salant & Dillman 1994).

The surveys and trial surveys discussed in this section were all drawn from a single sampling frame consisting of the mailing list for the membership of "Seniors' Choice", an organization sponsored by Valley Baptist Hospital in Harlingen, Texas. The membership is open to anyone age 55 or older and offers a number of in-hospital benefits as well as screenings (cardio-vascular, pulmonary, blood sugar, etc.), vaccinations for flu and pneumonia and frequent lectures by local specialists on various diseases and conditions. Dues are set at \$10.00 per year in order for the membership to be as inclusive as possible.

This frame was selected because it consisted entirely of people age 55 to 98, for low cost and convenience. The data for members age 60 and older of this frame at October 2000 is seen below.

Age brackets	Number of members in bracket
Ages 60 to 69	891
Ages 70 to 79	1609
Ages 80 to 89	720
Ages 90 to 99	63
Total of all brackets	3283
Mean age	84
Median age	78
Mode age	71

*Figure 3.3 Age brackets from Seniors' Choice frame Source: Seniors' Choice membership list, Fall 2000.*

Although the list included some members who are under age sixty, each survey collected birth year data to permit age screening. The mailing list was available at no cost because the questionnaires were mailed out in a bulk mailing along with the Seniors' Choice quarterly newsletters. The Seniors' Choice staff was both helpful and cooperative with this research, but was very careful that the privacy of the members would not be misused in any way. Consequently two requirements were placed on the use of this mailing list:

- Management must approve each questionnaire sent to the mailing list
- The questionnaire must be sent to everyone on the mailing list

There were some disadvantages to using this list. Initially, no reply envelopes were permitted in the mailing, although this restriction was removed in 2002. In addition there was no way to follow up with non-respondents to encourage them to participate. It was understood and accepted that these factors would have a negative effect on response rate.

### **3.3.3.2 Survey research**

Several survey mailings were sent out to members of Seniors' Choice, and similar procedures were followed in each mailing. These included:

- Questionnaire design
- Questionnaire preparation and mailing
- Software setup
- Receiving returned questionnaires
- Coding and entering data

These procedures are described here, although variations from these descriptions will be included in the sections discussing each survey.

### **Questionnaire design**

Each questionnaire was composed of three parts:

The opening, which explained that the survey was part of a doctoral research project, who was conducting the survey and how to make contact by phone or email, the fact that participation was voluntary, that all information was

confidential (Council of American Research Organizations 1997) and that the first survey could also be taken at a web site. In addition, respondents were encouraged to volunteer for trial surveys or focus groups by enclosing their name and address on a separate piece of paper. This last comment also reinforced the point that the questionnaires included no identification of the respondents. Since no cover letter could be included in the mailing from Seniors' Choice, all explanatory information about the survey was included in the opening section. In the two small trial surveys sent by first class mail, a cover letter was included that provided this same information.

The questions, which varied in type and content between surveys, but concluded with demographic questions asking for the year of birth, sex of the respondent, marital status and, in the last survey, the educational status of the respondent. The questions arose primarily from the data collected in interviews and observations and generally sought clarification or new information. The systematic survey included one question that sought validation of the concept of four life stages after age sixty.

The closing, which explained to respondents how to submit their questionnaires by mail or deliver them to the Seniors' Choice office, and when they could expect to see the results of the survey. Finally, they were thanked for participating in the survey.

### **Questionnaire preparation and mailing**

In order to comply with the requirements set by Seniors' Choice for inclusion in their mailing, the questionnaire was created in MS Word format and edited to fit on one page, printed on both sides. In the case of the first trial survey, the questionnaire was re-created on the PollCat web site (Interscore, 2000), which offered software and hosting for surveys at no cost. In 2004, this site had been closed and was no longer available. When the questionnaire had been completed and posted on PollCat, a web address for respondents was generated. This address where respondents could access the web site was added to the printed questionnaire as a convenient alternative response method. The intent was to offer respondents the opportunity to submit their questionnaires electronically with no mailing costs, hopefully improving response rates. Because of lack of participation, the web site questionnaire was discontinued after the first trial survey.

The two surveys mailed out with the Seniors' choice newsletters were each submitted to Seniors' Choice for approval two months in advance of the mailing. Within two weeks the questionnaire had been formally approved for printing and the mailing date scheduled.

One problem arose at the time of the first mailing. The membership list included approximately 3300 names, so 3500 questionnaires were printed and delivered to the Seniors' Choice offices. At the time of mailing, it was discovered that approximately 2000 of the names on the list of members were spouses, and that the actual mailing list was designed to combine two spouses within one mailing piece in order to reduce

printing and mailing costs. This meant that the mailing would go to only 2348 addresses, with only one questionnaire permitted per mailing piece. This problem was resolved by the time of the second Seniors' Choice mailing and two questionnaires were included in each mailing to a couple.

At the time of the mailings with Seniors' Choice, the Seniors' Choice staff prepared mailing labels for members after consolidating the list so that each couple would receive only one mailing piece. The labels were attached to #10 envelopes and arranged in trays according to Zip Code in order to meet U.S. Postal Service requirements for bulk mail. Seniors' Choice volunteers then inserted the Seniors' Choice newsletter, a calendar and one questionnaire into each envelope. For the 2002 mailing, a second questionnaire was added to each envelope addressed to a couple.

No incentives, other than pre-stamped envelopes for members of the statistical sample and the two small trial surveys, were provided to encourage responses from the people included in this mailing. It is quite common for people in this age group in this geographic area to receive surveys in the mail which include coupons, one or two dollars in currency, offers to be included in drawings and other incentives for completing and returning a survey questionnaire.

### **Software setup**

The software used for entering and organizing response information and for analyzing results was SPSS 10.0 in 2000, then upgraded to version 11.0 in late 2001. The software was provided under license by Leeds Metropolitan University and renewed at the beginning of each calendar year. The SPSS software offers a number of features and considerable versatility, but has a substantial learning curve. At first appearance, the Data screen and the Variables screen resemble a spreadsheet, but only in appearance. Each possible answer to each question on a questionnaire must be provided a cell on the Variables page using the SPSS Data Editor, and open-ended questions must be coded for each possible category of response (Greenfield, 1996).

The questionnaires included several types of questions, including:

- Choose one answer from multiple choices
- Write in one answer
- Mark all answers that apply
- Rank the choices by preference
- Open ended – write in one or more answers or comments

For each question in which the respondent could select more than one answer, a variable had to be created in the SPSS Data Editor for each possible answer. Although the 2002 questionnaire included only 11 questions including those for demographic data, a total of 63 variables were created in the SPSS Data Editor to enter the data for each questionnaire. In addition, respondents added a number of notes and comments that were noted separately from the survey results.

### **Receiving returned questionnaires**

In the first survey, all written responses to the questionnaires were returned to the Seniors' Choice office by mail or hand delivered by the respondents. Each week, the responses returned during that week were collected from the Seniors' Choice office.

The PollCat web site was monitored daily for responses and a tally of the combined results was automatically generated and maintained by the PollCat software. When all returned questionnaires had been received, the totals from the web site were combined with the returns entered into SPSS.

The two small trial surveys and the statistical sample survey each included reply envelopes that were returned directly to my home address and were collected daily.

In all cases, as the completed questionnaires for each survey were received, a sequential number was written in the upper right corner of each questionnaire. This supplied a running count of the responses that would also become the entry sequence when the questionnaires were tabulated.

### **Coding and entering data**

The open-ended questions required coding for each possible category of response. As the questionnaires arrived, the responses to the open-ended questions were reviewed and temporary categories created to accommodate each response. When all questionnaires had been received, the categories were reviewed and combined as necessary to provide appropriate categories for each response. The categories were then entered into SPSS as stand-alone variables, as a single questionnaire could have several responses in a single open-ended question. The variables were set for positive entry only.

Responses were subsequently entered into SPSS and prepared for analysis. As each questionnaire was readied for entry, the number on the questionnaire was compared with the case number in SPSS, and, if correct, a check mark was placed by the number on the questionnaire. This assured that the responses were entered on the correct line, as a keying error could change lines and cause all subsequent entries to be incorrect. This small action assured that errors would affect only one line before they were discovered.

When all responses to the systematic sample survey had been entered into SPSS, a summary was created of the frequencies for each question. From this information, a one-page report of the results was prepared for the Seniors' Choice newsletter (See Appendix B).

### **3.3.3.3 Surveys and Trial Surveys**

### **Initial trial survey of the frame population, January 2001**

In order to test the mailing system, gauge response rates and solicit volunteers for small trial surveys and focus groups, a survey of the entire membership of Seniors' Choice was prepared in the fall of 2000. Because of the non-response bias, the data collected from this survey is considered informational only and is not included in the conclusions reached in this thesis. The purpose of this initial survey and the small trial surveys was:

- To learn survey methods and gain experience in conducting surveys
- To test potential questions for a larger survey
- To gain greater experience with mailing systems
- To gain experience with the SPSS software

The questionnaire included ten questions, mostly multiple choice, with space for comments included for several questions. The questions asked about the following subjects:

- Present state of health, self rated
- Major events experienced since age sixty
- Planning and preparation for the future that had been done
- Documents executed (i.e. -Will, Instructions to Physicians, Power of Attorney)
- At the request of the local Chamber of Commerce, a question relating to local activities that retired persons might find interesting.
- Demographic information

A copy of the complete questionnaire is in appendix B.

### **Response rate**

A total of 192 responses were received from the 2348 questionnaires mailed out, a gross rate of return of 8.18%. Only four responses came to the web site, so the web site survey approach was abandoned for future surveys with this population. Among the surveys that were returned, thirty-two members volunteered to participate in trial surveys.

### **Volunteer panel – Small Trial surveys-**

From the members of Seniors' Choice who volunteered to participate in trial surveys and focus groups, a panel of 45 people was formed. This group was used to test questions in trial surveys. Responses from this group to trial questionnaires were treated as informational only and the data was not included in the conclusions drawn in this thesis.

Two trial surveys were mailed out to members of Seniors' Choice who had volunteered to participate in research projects. A summary of the respondents and the process follows:

- Population- Members of Seniors' Choice over age sixty
- Frame- Seniors' Choice membership, averaging about 3300 members during the research period.
- Sample size- Forty-five members of Seniors' Choice who had volunteered to participate in trial surveys and focus groups.
- Data collection method- Two methods were employed:
  - 1- Thirty one-page questionnaires were mailed first class with a self addressed, stamped reply envelope.
  - 2- Fifteen questionnaires were sent by e-mail, requesting an e-mail response.
- Completion rate-
  - Small Trial I-Total of 30 responses, 27 by mail, 3 by e-mail, a total response rate of 66.6%.
  - Small Trial II- Total of 32 responses, 29 by mail, 3 by e-mail, a total response rate of 71%.

### **Small Trial I - Planning Attitudes, September 2001**

The purpose of this first trial survey was to learn about the attitudes of this group toward planning and to obtain an indication as to what extent these people had done planning for their futures during the course of their life since age sixty. The results of this trial survey were not statistically significant and therefore are not included in the analysis or conclusions sections of this thesis. A copy of the survey form and the resulting responses is in Appendix B.

The questionnaire included fifteen questions, some with multiple parts and several open-ended questions seeking to draw out more detailed information. The questions asked about planning that the respondent had done for retirement, specific planning for major areas of life, important life events and three demographic questions.

### **Mailing and Response**

A total of 34 questionnaires were mailed including two that had originally been sent e-mail questionnaires, each with prepaid response envelopes. Four persons responded to decline participation leaving 30 potential respondents. Although some replies arrived very late, apparently forwarded to northern states then mailed back to Harlingen, the number of mailed responses was 27. Fifteen people who had volunteered and had provided their email addresses were sent questionnaires by email. At the outset it had been hoped that a group of email volunteers could be established that could eventually be provided regular online questionnaires. Only three people replied by email, and two others asked to be switched to regular mail.

In total, thirty people responded of 45 who were contacted and did not withdraw, a total response rate of 66.7%.

### **Small Trial II- Health Status and Attitudes**

The purpose of this trial survey was to learn about health status and attitudes toward exercise and preventive care. A second purpose of this trial survey was to test potential questions for a larger survey and to gain greater experience with survey techniques and software analysis.

The questionnaire included twelve questions, some with multiple parts and several open-ended questions seeking to draw out more detailed information. The questions asked about the respondent's state of health, medications, exercise, activities and three demographic questions. The results from this trial survey are not statistically significant and therefore are not included in the analysis or conclusions sections of this thesis. A copy of the survey form and the resulting responses is in Appendix B.

### **Mailing and Response**

A total of 32 questionnaires were mailed including two that had previously been sent e-mail questionnaires, each with prepaid response envelopes. The number of mailed responses was 29, and three people of twelve replied by e-mail, a total of 32 responses to 44 questionnaires sent out by mail and e-mail. The response rate was 72.7%.

### **Principal research survey- Systematic sample - January 2002**

The frame for this survey was again the membership of Seniors' Choice. Based on the experience of the 2001 poll of the membership, three procedural changes were requested.

- Requested and received approval from Seniors' Choice to enclose stamped self-addressed envelopes to 400 systematically selected addresses.
- Requested and received approval to enclose two questionnaires to each couple.
- Requested but did not receive approval to make one or more follow-up mailings to the non-respondents in the sample.

The sample here is reflective of the Seniors' Choice membership, but cannot be construed as representative of a larger population.

### **Sample design**

Previous experience with this frame in trial surveys suggested that if prepaid reply envelopes were included with the questionnaire, a minimum response rate of 25 percent could be expected with no follow-ups or reminders. Because of the nature of the questions, it was decided that a sampling error of plus or minus 10 percent would be acceptable. Field research with this frame suggested that the population was "relatively varied" (Salant & Dillman, 1994). It was determined that a response of 94 usable questionnaires would be required to achieve a 95 percent confidence level in the results (p. 55). Assuming a 25 percent response rate, a minimum mailing would be to 376 persons. For convenience, this number was rounded up to 400 mailing pieces with pre-stamped envelopes.



A decision was made to take a systematic sample of the Seniors' Choice membership by inserting a prepaid reply envelope in every fifth mailing piece in the mailing trays. "In systematic sampling, every  $k$ th element in the total list is chosen (systematically) for inclusion" (Babbie, 1990 p. 92). To assure a random start, a number was blindly selected from a page of random numbers (Black, 1994 p. A2), the last digit determining the position of the first prepaid reply envelope. Only the questionnaires returned in the reply envelopes would be counted in the sample.

**The questions-** The first five questions asked for information that would be used when designing templates related to possible futures and would also be used to present information on life events. The sixth question asked for confirmation or rejection of four hypothetical life stages, a key research question and the seventh asked about attitudes toward planning for the future. The remaining questions were demographic in nature. (See appendix)

Question 1- asked about attitudes and feelings about retirement and offered nine descriptive choices plus an opportunity for comments. The descriptive choices at first appeared to be scaled, but the respondent is instructed to "Mark all that apply", which was intended to provide nine variables that could be compared against each other as well as against responses to other questions.

This question was the result of mixed images about ageing and retirement. Some media portrayals of ageing suggested that a high percentage of older people are lonely or unhappy, yet interviews and observations suggested that a high percentage of older people were very happy with their lives.

Questions 2- and 3- were opposites and both were open ended. Each asked the respondent about important life events, and the respondent was allowed to judge what was "best" and what was "worst". These two questions were something of a gamble, as trial questionnaires showed that some respondents did not fill in blanks, while others provided rich information. Since this research was investigative in nature and intended to uncover events that had not already been considered, these two open-ended questions were included. Despite the fact that they required more time for data entry and analysis, these questions had the potential to provide important information about life events that might not otherwise have been considered. One of the trial surveys had asked about life events, but offered a limited choice of answers. Asked as open-ended questions, respondents had the opportunity to suggest events that they found important that had not occurred to the researcher.

Question 4- asked respondents to rank their order of preference for housing in their dependent stage of life, and included an opportunity to add "Other" choices. Evidence appeared to be growing in the interviews that people would prefer to remain at home, even if disabled or terminal, rather than be put in a nursing home. This question sought to learn how older people felt about where they would prefer to receive care.

Question 5- asked respondents to rank their order of preference for caregivers in their dependent stage, and included an opportunity to add "Other" choices.

This question is similar to the previous question, except this question asked who would be the preferred caregiver.

Question 6- asked respondents to either confirm or reject a hypothesis about life stages after age sixty and provided an opportunity to add comments. This question was specifically designed to determine if these respondents, who could by nature of their ages be considered experts, agree or disagree with a critical proposition of the research. This question asked the respondent for an opinion about a proposed set of life stages after age sixty.

7-This question asked respondents about their attitudes toward planning for the future. The respondent was instructed to mark one answer, although the four answers each tended to exclude the other three. This question attempted to learn about the respondent's attitudes toward thinking about or planning for the future.

Four demographic questions were included at the end of the questionnaire, asking about the respondent's level of education, year of birth, marital status and sex.

A copy of the survey questionnaire is located in Appendix B.

### Preparing and Mailing the Questionnaire

Starting from the first envelope of the first tray, a volunteer counted to the fifth envelope (five was the last digit of number selected from a list of random numbers) and inserted a stamped, pre-addressed return envelope, providing a random start for the sample (Salant & Dillman, 1994) and (Babbie, 1995). From that mailing envelope, volunteers counted to every sixth envelope and inserted a stamped and addressed 6 ¾ inch reply envelope for every address in the systematic sample (Robson, 1994) and (Babbie, 1995).

It is important to note here that no incentives, other than a pre-stamped envelope for members of the statistical sample, were provided to encourage responses from the people included in this mailing. It is quite common for people in this age group in this geographic area to receive surveys in the mail which include coupons, one or two dollars in currency, offers to be included in drawings and other incentives for completing and returning a survey questionnaire. A copy of the survey form is in Appendix B.

### The response

As the returned questionnaires arrived, they were placed into two groups, the first being those that came in the pre-printed envelopes of the sample, the rest being from people who supplied their own postage or delivered their questionnaires to the Seniors' Choice office. The second group was set aside for processing after the sample group had been completely processed and described in the next section as the "Parallel Survey."

As the sample group envelopes were opened, a sequential number was written in the upper right corner of the questionnaire. This supplied a running count of the responses that would also become the entry sequence when the questionnaires were tabulated. A total of 186 responses were received.

### Response rates

Four hundred pre-stamped envelopes were sent out with the Seniors' Choice mailing and 186 completed responses were returned, a gross response rate of 46.5%, substantially higher than the anticipated response rate of 25% based on previous responses with no incentives and no follow-up reminders. Textbooks (Salant & Dillman 1994), (Black, 1994) and (Babbie, 1995) suggest a 50% response rate as acceptable, but this rate generally assumes at least two follow up mailings (Babbie, 1995) and may include incentives (Salant & Dillman 1994) such as coupons, cash or eligibility for sweepstakes drawings. Babbie does go on to suggest that a response rate of 40% might be expected prior to any follow-up (p.260).

The Press Ganey organization has conducted research relating specifically to response rate bias. One conclusion was that "On average the one-wave mailing produced a 38.1% response rate." (Kaldenburg, 1998 p.4). Their research also concluded that some characteristics were "associated with significantly lower rates of response", including single wave response rates for the "Very Old" of 28.9%. Based on Babbie (1995) and Kaldenburg (1998), it would appear that the response rate for this systematic survey was slightly higher than the expected response for a single-wave mailed survey.

### Response rate bias

Observation of the Seniors' Choice population and analysis of the demographic data of the respondents were absent any clear indication that any specific category of people in the selected sample failed to respond or that any specific category responded in disproportionate numbers.

### **Parallel Survey of Seniors' Choice members, January 2002**

At the same time that the 400 questionnaires were sent out to a systematically selected sample, identical questionnaires were also sent to all other members of Seniors' Choice. The procedures for this survey were exactly the same as for the Systematic Sample survey discussed immediately above except as noted below.

Respondents to the survey either mailed the questionnaire at their own expense or delivered it to the Seniors' Choice office. As replies were received, they were numbered sequentially in red ink to avoid any confusion with the sample returns, placed together and held until after all responses to the systematic sample survey had been collected, entered into the computer and results tallied. When the systematic sample survey had been computerized, the results of the parallel survey were then entered into a separate database. This survey data was kept separate from the

systematic sample data throughout. A copy of the survey form and the resulting responses is in Appendix B.

### **Response**

A total of 222 completed questionnaires were returned from the approximately 2900 members of Seniors' Choice who did not receive pre-stamped reply envelopes. One questionnaire was rejected because the respondent was under age sixty, leaving a total of 221 responses, a response rate of approximately 7.6%. Because of the low response rate, the data collected from this poll is considered informational only.

### **Summary of responses from Seniors' Choice members**

In all, 5776 questionnaires were provided to members of the Seniors' Choice frame through trial surveys, a systematic survey and the parallel survey. These surveys were delivered by bulk mail, first class mail, email and in person. A total of 684 completed questionnaires were returned and processed.

	<b>Questionnaires</b>	<b>Responses</b>
Trial poll	2348	192
Focus group survey	35	23
Trial survey I	49	30
Trial survey II	44	32
Systematic survey	400	186
Parallel poll	2900	221
<b>Totals</b>	<b>5776*</b>	<b>684</b>

*Figure 3.4- Participation in surveys of Seniors' Choice members.*

\*Total membership of Seniors' Choice averaged approximately 3300 during the period of the study. Most members received at least two questionnaires during the research period although some members could have received as many as five questionnaires.

Although the survey research was a critical part of the total research, it was not the dominant method. The use of multiple methods offered different viewpoints for similar data, in effect verifying or triangulating the results of one method with the result of one or more other methods.

### **3.3.4 Document study**

A variety of documents were studied during the course of this research. In this category are included articles from newspapers, magazines, journal abstracts,

advertising literature, insurance contracts, obituaries, television documentaries, Internet search documents and other sources.

### **Defining documents**

During the course of this research, a number of documents were consulted or studied, along with considerable literature. In order to differentiate documents from literature, the following table lists some of the categories of documents that were studied. Statistical tables are included here, although statistical studies, commentaries and discussions are included in the literature.

<b>Document category</b>	<b>Examples within a category</b>
Advertising Brochures	Descriptions of diseases and symptoms Equipment for care, mobility, assistance Long term care facilities Hospitals and acute care facilities Insurance descriptions
Contracts and proposals	Health Insurance contracts Medicare benefit booklets, Q&As Long term care insurance contracts Death benefit contracts
Datasets	Census data Deaths and causes Ageing projections Worldwide social security benefits
Legal documents	Oregon Death With Dignity Act Instructions to physicians Last will and testament Medical power of attorney
Lists	Medical professionals Survey of University Futures Courses Futurists Ageing organizations
Organization descriptions and brochures	Professional organizations Social services directories
Standards for professions	Council of American Survey Research Organizations American Association of Public Opinion Research American Statistical Association

*Figure 3.5 Categories of documents and pertinent examples*

### **Newspapers articles**

Newspaper articles relating to ageing and other aspects of life often identified current research and sources of new journal articles as well as daily life, occasional short biographies, and indicators of accumulating interest, suggesting trends. Over the period of this research, newspaper reading included three daily newspapers; one local, one regional or national and one national. Many articles were clipped, categorized and filed for future reference.

### Magazine articles

Many magazines provide a window into popular culture, while others bridge the distance between daily life and authoritative journals. Even publications that are sometimes dismissed as “trash” provide an insight into what people are reading and find of interest. During this research, publications at each end of this scale were explored as well as a wide range of publications more in the middle than the extremes.

### Internet search documents

The Internet search engines, particularly Google, were valuable sources throughout this research. Some documents qualified as literature and were cited, but many documents yielded pieces of information that led to other documents and other sources. The Internet also provided access to important databases of statistics, several of which are cited in the research.

### Opportunity documents

One interesting set of documents included forty-six biographies submitted for a fiftieth high school reunion. This is an example of data that was collected but never analyzed, as mentioned several times by Glaser (1998). These forty-six individuals graduated from the Milwaukie, Oregon high school in 1952, so each respondent was over age sixty-five but under age seventy. Each member of the class was invited by the reunion committee to submit a one-page summary of his or her life since high school graduation in order to let classmates know what they had been doing for the past fifty years. One specific question asked about hobbies and special interests, which yielded a list of seventy different items of interest to this age group. The questionnaire also asked about life experiences, and these responses were also coded and categorized.

### Journal abstracts

Journal abstracts and articles were studied as documents, scanning for life experiences, events and behaviours that were often unrelated to the theme of the research or the point of the article, but provided valid data for this research about human experience. The same technique was applied to newspaper and magazine articles. In each case, the data was coded, compared with other incidents and categorized. Subscriptions to the Journal of the American Geriatric Society, The Gerontologist, Annals of Long Term Care, and American Sociological Review provided substantial current information and data on the field of ageing.

### Insurance, government, pension and legal documents

Documents from the Social Security Administration, Medicare, pension plan rules and guidelines and long term insurance proposals and contracts all provided additional data related to ageing, retirement and life. Documents such as wills, directions to physicians, medical powers of attorney and other documents are very important to older people in preparation for the late stages of life.

## **3.35 Field Research- Health and care facilities**

An important element in life for all stages is health care, and a portion of the research was devoted to health care facilities. During the course of the research, visits were made to clinics, hospitals, emergency rooms, continuing living facilities, assisted

living facilities and nursing homes. Considerable variation was found between facilities of the same type, most noticeably in nursing homes and hospitals. Some variations were related to size, some to the age of the facilities and others to the quality of the facility and the care level within the facility.

Nursing homes in the United States have earned an unsavoury image among many older people, partly because of negative publicity and partly because some nursing homes over the past decades have been conspicuously bad. In earlier decades in some nursing homes, the odour of urine was unfortunately common. Some nursing homes were worse. Physical and chemical restraints were overused, and thievery and abuse were reported. This research offered an opportunity to revisit those images of the past.

### **Additional research**

During the course of this research, I attended conferences, meetings and lectures that related to ageing and other aspects of the research

#### Texas Department on Aging Conference August, 2000, Austin, Texas

This two-day conference provided an opportunity to learn about services provided by the Texas Department of ageing. The conference included a number of exhibits by companies providing services and products to older people. In addition, I attended lectures on a variety of topics including:

- Alzheimer's disease
- Geriatric medicine
- Physical conditioning for elderly
- Nutrition
- Nursing home care
- Elder Abuse
- Assisted living
- Care giving

The conference provided substantial background data on ageing services, procedures and facilities.

#### Long-term care insurance

The expense of a long-term illness is of considerable concern to people over age sixty, as the possibility of such an illness increases with age. Although benefits are becoming more standardized and costs have come down in recent years, there is still considerable concern among older people as to the relationship between cost and benefits. Research in this area included meetings with company representatives, attending long-term care insurance seminars, attending lectures and conducting Internet research.

#### Local Lectures

Local organizations including Valley Baptist Hospital, Seniors' Choice and the Center for Creative Retirement sponsored lectures and events throughout the period of this

research. Speakers included medical professionals, college professors and others covering a wide range of topics, many related to health. These lectures at Seniors' Choice were to inform older people about the ageing process, help them understand various medical conditions and make them aware of how to maintain their health. The Center for Creative Retirement offered lectures, activities and events of general interest..

### **Presentations of research concepts and findings**

The process of developing workable concepts to help individuals explore their personal futures required that each concept be presented, tested and discussed, both with people who could use the concepts in their own lives as well as with educators familiar with teaching methods and other futurists familiar with futures theory and existing futures methodology.

A primary assumption underlying all of these presentations was that the concepts and methodology must be presented in a form that audiences could relate to on a personal level. Consequently, the presentations evolved with each repetition as different ways of presenting material were weighed against each other. In some cases audiences were asked to answer questionnaires, in others the verbal discussions with the audience were considered.

### **Presentation to World Future Society July, 2001, Minneapolis**

The annual meetings of the World Future Society provided an opportunity to present research and findings to other futurists. The audience included academics, students, career futurists working in business, government and non-government organizations, writers and other people with an interest in the future. This presentation introduced theoretical and methodological approaches to personal futures for the second half (after age sixty) of life. Tanya Accone, a graduate student in Studies of the Future at the University of Houston Clear Lake, presented personal futures for the first half of life. Both portions of the presentation included a PowerPoint presentation, handouts, and worksheets

The slides for the second half of life included many of the same slides shown to the Seniors' Choice members, with some additions. Attendance for this presentation was about 90 people, and a sizeable part of the group was well under age sixty. Many of the questions asked by the audience indicated that younger people in the audience were interested in the subject matter and concerned with care for their elderly parents. Considerable positive feedback was received immediately after the meeting and later in written reports to the World Future Society. No negative feedback was received in either case.

### **Creative Retirement presentation, April, 2003, Harlingen**

Approximately fifty-two people, all over age sixty, attended this presentation, which was one of nine monthly programs scheduled from September through May each year by the Committee for Creative Retirement in Harlingen, Texas.

Included in the presentation were slides in MS PowerPoint format which:

- Introduced the concept of four specific life stages after age sixty



- Introduced specific life categories
- Introduced the concepts of scenarios and alternate futures

At the conclusion of this presentation, several members of the audience asked to be included in personal futures workshops, which were discussed in the presentation.

#### World Future Society presentation, July 30, 2005, Chicago

The World Future Society, based on a submitted abstract, scheduled a presentation of the research concepts titled “Applying Future Techniques and Theories to Your Personal Futures” for their annual convention, held in Chicago. The presentation included MS PowerPoint slides created for this meeting and a workbook of charts and worksheets that focused on applying the concepts developed in this thesis to personal research and the application of futures methods. A copy of this workbook is in Appendix C.

#### **Publication**

As the results of this research converged to become concepts and eventually arrive at a usable form, it became important to share this information with other futurists and to have the concepts judged by peers. The first publication of these concepts appeared in the peer reviewed journal *Foresight* in December 2003, titled “Ageing: a personal futures perspective” (Wheelwright 2003).

Subsequently, an essay, “Your Map to the Future” (Wheelwright, 2004) focusing on life stages was submitted, accepted and published in a series of books “*Tackling Tomorrow Today*” (Shostak, 2004) aimed at teenagers. The article was reviewed by a panel of teenagers for suitability and interest prior to acceptance.

### **3.3.6 Focus groups**

The term “focus group” is used liberally here for lack of a better term. Although each meeting had a structure, and each meeting included a group of people who were believed to have specific knowledge to contribute, the meetings were very casual in nature. When the groups discussed questions or subjects, the manner was very informal. As Babbie describes,

“...an attempt is made in focus groups to simulate the kinds of bull-session discussion people commonly have when they discuss a topic.” P. 249.

In each case, the results of the thesis research up to the date of the meeting were presented to the group, then members of the group were asked for comments. Notes were made of comments, and in some cases questionnaires were distributed and collected. In each case, useful data was collected.

Focus groups were differentiated from simple presentations by the interactions with the group, including their questions, suggestions, criticisms and answers to questions placed before the group. Each focus group was made up of people with a specific interest to the research. Older people offered considerable life experience and specific experience with life stages. Academics and fellow PhD. students offered structural

and organizational advice, including a suggestion for strong boundaries between life stages. Futurists focused on forces within individual lives as well as images of life.

### **Seniors' Choice July, 2001, Harlingen**

The first focus group was composed of members of Senior's Choice and was open to all members. Approximately thirty-five people attended, which was a large number for a focus group, but provided an opportunity to have live interaction with a group of unknown people. Because all members of Senior's Choice had the opportunity to attend, the group was entirely self-selected. Participation was limited to members of Senior's Choice over age sixty.

The meeting was divided into three parts:

- Introduction of the research subject
- Discussion of information gathered and implications
- Written survey of the participants

The introduction began with a brief explanation of the background to the research, then briefly outlined the results of a recent survey of the Senior's Choice membership. The discussion centred on the implications of what had been learned from the 2001 survey combined with earlier research. There was specific discussion about several aspects of life after age sixty and how it related to studies of the future.

The meeting began with a MS PowerPoint presentation which:

- Introduced and discussed the concept of four specific life stages after age sixty
- Introduced and discussed six major life areas
- Introduced and discussed the concept of scenarios and alternate futures

As part of the discussion, worksheets were distributed to the audience and their use demonstrated with imaginary future situations. Many of the group participated in the discussions with both questions and comments.

At the conclusion, twenty-three members of Seniors' Choice completed and returned questionnaires that had been distributed to the audience. The questionnaire asked specifically about the individual's opinion of the four life stages that had been discussed and whether or not the descriptions were realistic. Demographic information was collected.

Notes were made of the meeting and coded later. The responses to the questionnaire were coded, then entered into SPSS for analysis.

### **LMU Faculty of Health and Environment and PhD. students, October 2001**

#### **Focus of meeting:**

- Life stages
- Life areas (later, Domains)

- Life events

Presented theoretical and methodological approaches to personal futures for the second half (after age sixty) of life to several LMU faculty members, graduates of the LMU Foresight and Futures Studies program and other PhD. candidates who were also engaged in futures research.

The slides for this presentation were largely the same slides presented to the Seniors' Choice members and to the World Future Society members with some modifications and additions. The question and answer session following the presentation was very positive and the audience appeared very receptive to the concepts presented. Because the audience was small, discussion was detailed and usually involved a number of people in each topic. Some of the discussion here centred on preparing the information for this dissertation and its defence, including recommendations for a strong definition of the borders between the four proposed life stages.

### **UHCL Future Studies –students, faculty and alumni meeting, April 2002**

#### **Focus of meeting:**

Personal futures framework concept

Adapting futures methods to personal futures

Presented theoretical and methodological approaches to personal futures for the second half (after age sixty) of life to a small group of students, alumni and faculty of the Studies of the Future Program at the University of Houston Clear Lake.

This presentation included many of the slides from previous presentations:

- Introduced the concept of a framework for personal futures
- Introduced the concept of four specific life stages after age sixty
- Introduced specific major life areas, major life events and archetypes
- Introduced the adaptation of Scenarios and Strategic Planning to personal futures

Discussion ensued on each topic, including questions and comments by the participants.

At the conclusion of the meeting, attendees were asked to complete a questionnaire asking the respondent's opinions about the validity of the framework concept and the inclusion of life stages, continuing life trends and major life events as components of that framework. In addition the questionnaire asked if personal Strategic Planning, personal Scenario Development and the scenario planning worksheets were valid approaches to personal futures. Four questionnaires were returned from the audience of six.

### 3.37 Conceptualization

Glaser (1998) describes how concepts emerge from the study of the data, coding and categorization into generalizable ideas that combine categories with their properties. The diagram below illustrates how the grounded theory approach was applied during this research and how concepts emerged from the process.

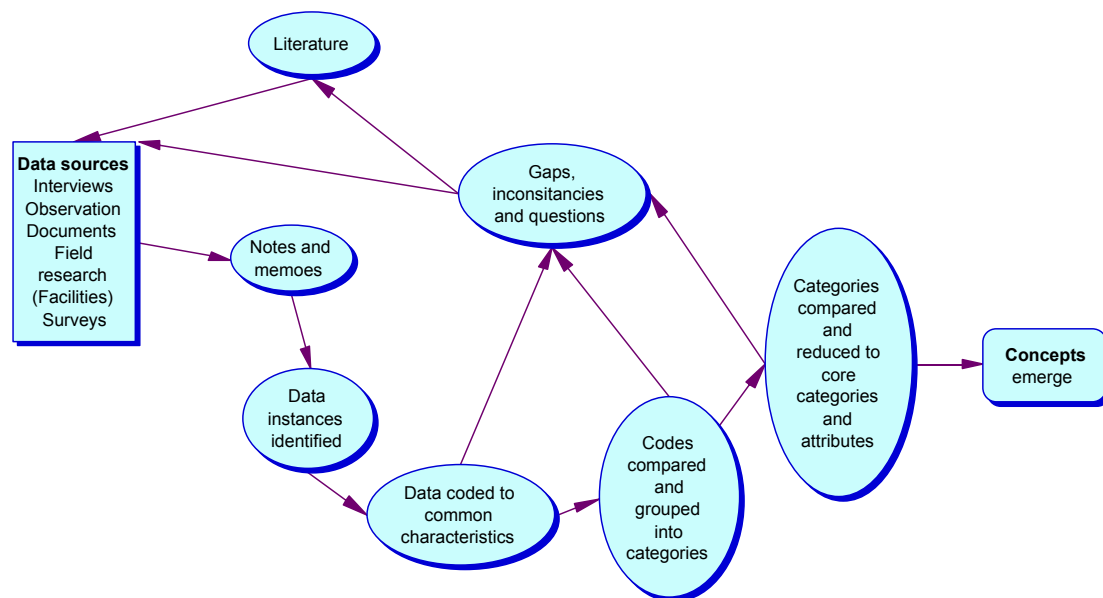


Figure 3.6 A diagram of Grounded theory as applied to this research. Grounded theory is not a linear process, but involves repetitive cycles.

This illustration includes a loop for literature research, which might appear to contradict Glaser's (1998) strong assertion "do not do a literature review in a substantive area and related areas where research is to be done" (p.67), but as he states later,

Once a fundamental process is generated then a particular literature becomes apparent to review. The literature is discovered just as the theory is. Once discovered, the literature is compared as simply more data. (p. 69)

In the course of this research a number of generalizable concepts emerged that bear on the fields of ageing and personal futures. These concepts were formed by first identifying categories and their properties, looking for causes and drivers, then determining whether or not the category could be generalized, and if so, what were the exceptions.

### 3.4 Ethical considerations

*"It is possible, however, to point to a more or less agreed upon set of ethical norms relating to the execution of research."* Earl Babbie (1973)

Whenever research is conducted that involves humans, there is a concern for the manner in which these participants are treated. Before conducting any surveys, interviews, or meetings with people who would be asked for information, guidelines

for the membership of the major research associations were consulted. Throughout the investigations for this dissertation, the ethical standards recommended by several organizations were followed. Among the organizations providing ethical guidelines for survey research are:

Council of American Research Organizations (CASRO)

American Statistical Association (ASA)

American Association for Public Opinion Research (AAOPR)

Specifically, the guidelines require that the researcher:

- Protect the confidentiality of the data collected from the respondents
- Inform the respondents of the general nature of the survey and the intended uses of the data
- Collect only data pertinent to the purpose of the survey
- Avoid any practice that might harm, embarrass or mislead the respondent
- Protect any personal information about the respondent from any use other than research purposes
- Respect the privacy of each respondent,
- State explicitly that cooperation with the survey is voluntary
- Identify by name the person conducting the survey or interview
- Respect the right of individuals to decline participation  
(Council of American Research Organizations 1997).

In addition, the American Statistical Association (1999) has prepared a set of ethical guidelines for researchers that covers:

- Professionalism
- Responsibilities to Funders, Clients, and Employers
- Responsibilities in Publications and Testimony
- Responsibilities to Research Subjects
- Responsibilities to Research Team Colleagues
- Responsibilities to Other Statisticians or Statistical Practitioners
- Responsibilities Regarding Allegations of Misconduct
- Responsibilities of Employers, Including Organizations, Individuals, Attorneys, or other Clients Employing Statistical Practitioners  
(American Statistical Association 1999).

On a personal level, ethics were a consideration throughout the research, and fell into the following categories:

- Ethical treatment of respondents, interviewees and other participants, including the protection of their identities and data and never imposing my own thoughts into the discussions except to ask for opinions.
- Ethical use and presentation of the collected data, making certain that the output accurately reflected the input.
- Ethically responsible development of concepts, taking into consideration how individuals might make use of these concepts in their own lives. If the results of this research are put into practice, then individual lives may be affected, so it is important that each concept be carefully considered for its potential impacts.

Every effort has been taken to assure that any recommendations of this research that might at some point reach the general public was very carefully considered for the possible impacts on people's lives.

### **3.5 Chapter Conclusion**

This chapter discussed grounded theory methodology and described each of the methods employed in the research. The methods, their design, preparation and procedures by which data was generated were also detailed. In addition to generating data for the research, the lessons learned with the use of each of these methods invested the researcher with valuable experience.

Once the research methods were deployed and data generated, the results were collected, coded, compared and analyzed to develop core categories and concepts. The next chapter will present the results of the research and an analysis of those results. The chapter will introduce three core categories along with concepts related to each and a proposed framework for personal research.

# 4.0 Results and Analysis

## 4.1 Introduction

Chapter 3.0 described grounded theory methodology, the methods of data collection and the procedures followed to collect data for this research. This chapter will describe the results obtained from each research method and analyze those results and their impacts on and inferences for the research. In order to simplify reference to the methods described in Chapter 3.0, the section numbering in this chapter is organized to correspond with section numbers in Chapter 3.0. For example, section 3.3.1 describes Interview procedures, and section 4.3.1 discusses the results obtained from the interviews.

In the research results described in this chapter, three core categories, emerged from the data, and these categories provide the major headings under each method. The three core categories are:

- Life stages
- Personal domains
- Life events

From these three categories, a number of concepts arose and are discussed in section 4.4. Relating these concepts to each other led to an additional concept, a framework of foreknowns in human life.

## 4.2 Grounded theory methodology

As described in the previous chapter, this research relied primarily on Glaser and Strauss' *Discovery of Grounded Theory* (1967) then on amplification or clarification as provided by Glaser's *Doing Grounded Theory* (1998) as the methodological foundation for this thesis. Strauss and Corbin's *Basics of Qualitative Research* (1998) offered insights, but when a choice was required between methods or techniques, other than discussed above, Glaser (1998) prevailed. (Also see Section 3.2).

## 4.3 Research Results

This section discusses and analyzes the results of the research methods described in section 3.3 of the previous chapter. The results of the research are described in six following subsections, one for each method used in the research.

- 4.3.1 Interviews
- 4.3.2 Observation
- 4.3.3 Surveys
- 4.4.4 Document research
- 4.4.5 Field research
- 4.4.6 Focus groups

Within each section describing the results from one research method, the results for that method are divided into the three core categories; life stages, personal domains and life events. The survey results take up a substantial portion of this section, but are not the dominant method of research. With a total of 684 (see Figure 3.4) survey

responses to the six separate surveys, the data is significant, but not any more important than the other methods.

#### **4.3.1 Results from interviews**

The interviews and observation provided the earliest data. The data collected from the interviews were coded and categorized as described in section 3.3.1. Repeated comparisons of the codes and categories combined with analysis of relationships within and between categories led eventually to the creation of three different areas of interest, or core categories, discussed in this section

##### **Life stages**

The research began with an interest in life stages, but with no preconceptions other than awareness of different historical or theoretical approaches to life stages. During the interviews, it became clear that some of the older people had experienced periods in their lives that affected or changed everything about their life, appearing to be personal “paradigm shifts.” Two examples where individual’s lives changed completely were the cases of individuals who had

- become completely dependent on others to provide care and manage their lives
- had been given a terminal diagnosis or arrived at a terminal stage of a condition or disease.

Less dramatic, but still a major change in an individual’s life was the transition from being healthy, independent and capable of managing life, to a state of decline, either physical or cognitive. It appeared that there was a typical sequence in older people’s lives from healthy independence to the transition stage, then into a dependent period and finally to the terminal stage of life. The interviews revealed that some people had gone to the dependent or terminal stage, yet recovered and returned to being independent and healthy again. These four stages were eventually given descriptive names,

- Independent elder
- Vulnerable elder
- Dependent elder
- End of life stage

These four stages were then proposed to replace Erikson’s (1986) last life stage, “Old Age.”

##### **Personal domains**

People talked about many facets of their lives during interviews, but the topics seemed to fall into six broad categories:

- Activities
- Health
- Housing
- Finances
- Social
- Transportation



These categories were each derived from sub-categories (Glaser, 1998), as shown in the table below. In turn, the subcategories were constructed from the open coding of incidents as described in examples in section 3.3.1.

<b>Activities</b>	<b>School</b> Preschool K-12 University Technical Private	<b>Work/Career</b> Self employed Organization Government Unemployed Retired	<b>Religion</b> Member Leader Advocate	<b>Sports/Hobbies</b> School Team Individual Spectator Travel Crafts Technical	<b>Community</b> Organizations Committees Events
<b>Finances</b>	<b>Income</b> Wages Investments Rents/royalties Other	<b>Expense</b> Household Personal Business Investment	<b>Assets</b> Real estate Property Investments	<b>Debt</b> Housing Personal Utilities Auto Other	<b>Risks/ Insurance</b> Home Auto Medical Life LTC Other
<b>Health</b>	<b>Status</b>	<b>Conditions or diseases</b>	<b>Diet and exercise</b>	<b>Medical care and medications</b>	<b>Personal Care</b>
<b>Housing</b>	<b>Home</b> Parents' Own home Children's Other	<b>Care facility</b> Assisted living Nursing home Hospital Hospice Other	<b>Community</b> Neighbourhood City	Nation	Region Climate Continent
<b>Social</b>	<b>Family</b> Mother/father Siblings Grandparents Aunts, uncles, cousins	<b>Friends</b> Neighbours Sports School	<b>Co-workers</b>	<b>Community</b> Neighbours Activities	<b>Advisors</b>
<b>Transport- ation</b>	<b>Personal</b> Walk Bicycle Walker Scooter Wheelchair	<b>Car</b> Personal Business	<b>Public</b> Local (taxi, bus, train) Distant (airplane, ship)	<b>Special</b> Ambulance Wheelchair van	<b>Others</b>

*Figure 4.1 Table of categories within the six personal domains and examples of subcategories within those categories. This is not a complete listing, but provides examples of categories and subcategories that make up the domains*

It was apparent early in the interviews that all individuals are managing their lives on multiple levels, every day. This would appear to be true of people in every society worldwide. Each person must cope with all six of these categories, regardless of economic level, geographic location or social environment. Even in a very poor society, property of any kind including tools or livestock, constitute assets, which is part of the financial category. Also, in these same societies, the only transportation choice may be walking, and distances must be managed, particularly for people with physical limitations.

### **Major life events**

Applying grounded theory methods to the data derived from interviews treated events as data points that then fell into categories. Analysis of these events for patterns before and during the coding and categorization revealed that there are many different types of events. Very important from the standpoint of personal futures research was the fact that many events appeared to correlate with times, ages or stages of life.

Some events are chronological in nature, such as birthdays and anniversaries. Other events are legally mandated, such as the age at which one is able to obtain a driver's license, vote, purchase alcohol, qualify for Social Security benefits and similar events defined by laws. Events that are biological in nature, particularly those related to growth and development, maturity and decline are usually chronological.

Some health events are also related to age. Contagious diseases such as measles, chicken pox and mumps are considered childhood diseases. Vision problems occur in the early forties, heart troubles and blood pressure problems are more frequent in the fifties and sixties, while Alzheimer's disease becomes higher risk starting in the late sixties.

Many important life events are intentional and occur by choice. Marriage, children, divorce, career choices, changing residences are example of important life events that occur largely by choice. Travel, hobbies and sports are also events that occur by choice.

Turning point events change the direction of a person's life. Marriage, children and divorce are obvious examples, as are heart attacks, major accidents, retirement, moving to a nursing home and many other events, including the death of a spouse. The importance of turning point events to personal futures research lies not only in the timing of such events, but also in the impacts.

The interviews provided the original data that drove the research, allowing the interviewer to reach into the personal lives of a number of individuals. It was largely from the interviews that research questions and early concepts emerged, introducing life stages after age sixty, personal domains and major life events. It was as a result of the interviews that the concept of a life model composed of these three elements emerged, suggesting a workable method for the development of personal futures.

### **4.3.2 Results of observations**

The results described in this section were obtained from the observation or participant observation method described in section 3.3.2 in the previous chapter. When combined with interviews, observation sometimes identified differences between what people say and what they do. For example, some people who stated emphatically that they did not want to ever go to a nursing home had, through their own actions or inaction, set themselves up to go to a nursing home whenever the time came that they needed full time care. Others, who talked about healthy lifestyles, were observed to be heavy smokers, to eat unhealthy foods or to avoid exercise.

Participant observation was also helpful toward understanding groups of people, interactions between individuals and behaviours. This method was very important to understanding different stages of life and recognizing the adjustments to change that people make during the later stages of life. Observation of different cultures in a variety of countries prior to and during the research provided an important perspective.

#### **Life stages**

Observations of older people suggested that although all were in a stage of life Erikson (1986) termed “old age” there were some differences. Some people were healthy and enjoying life. Others were frail or sickly. Some were in institutions; assisted living, acute care or nursing homes. Some were dying. There appeared, at first, to be a normal sequence of decline, yet some individuals would survive terminal conditions and return to good health.

Appearances of ageing or decline varied between individuals, but there appeared to be some clear categories. Some people, regardless of chronological age, appeared to be healthy, active and in full control of their lives. Another category included those who were physically frail, suffering from multiple conditions or having cognitive problems, but not totally dependent on others. A third category was made up of people who could no longer manage on their own. This group needed help with basic life functions and was clearly not able to manage their own lives. Many of these individuals were in nursing homes, while others received care at home from a spouse, a child or a visiting nurse. The final category was the group of people who were dying. They had received a terminal diagnosis or had reached the terminal stage of a disease. These people were eligible for hospice care, which is palliative care to relieve pain and to make the patient comfortable but not including an attempt to cure.

It was also observed that people might experience dependency or a terminal diagnosis at any stage in life, yet these instances are not typically a part of life’s progression. An adolescent who is dependent or terminal is still an adolescent, and the illness or condition is not typical for that stage of life. The four proposed stages of life after age sixty discussed here appear to be a common sequence or pattern in life.

#### **Personal domains**

Observations of individuals and groups added support and detail to the six categories, or domains within each person’s life discussed above.

## Activities

Work, school, volunteering and community involvement are areas where large numbers of people were observed to be active, even after the traditional retirement age. A number of older people provide care for spouses, grandchildren, friends and family without compensation. In many cases care giving is very demanding, both physically and emotionally.

Travel was observed to be one of the most popular activities for older people, even for some in poor health. Large numbers of retired people migrate from North to South each winter, then north again in the spring. They use all modes of private and public transportation, some travelling in motor homes, caravans or recreational vehicles varying in size from tiny to huge. Some have second homes and others take cruises or group tours. Travel is an activity that even the frail or disabled can enjoy, and many people were observed travelling with wheel chairs or walkers, some with portable oxygen, others with a friend to lean on. The primary requirement for enjoying travel appears to be discretionary time, as there is some type of travel available for nearly any budget.

Walking appeared to be a very popular activity for older people, whether for exercise, relaxation or a convenient and inexpensive way to get from one place to another. In many communities, older people may be observed walking in parks, malls, trails and neighbourhoods, particularly in early mornings and evenings. Younger people also walk, jog and run to maintain or improve their fitness.

Golf is a very popular sport among older people, and golf courses are at the center of many retirement communities. Again, discretionary time is important. Older people participate in a wide variety of sports, but the majority appears to avoid activities that have strong impacts on their backs or joints.

## Health

Medications were seen to be a part of life for older people. Even the very healthy and active elders may be taking multiple medications and the medications that older people take are usually expensive. In the United States, prescription drugs are generally more expensive than other countries, so sizeable numbers of older people travel to Canada or Mexico to purchase medications at lower prices. Others purchase their medications over the Internet. Unfortunately, many medications have side effects and multiple medications can lead to conflicts or overmedication.

As people grow older, they are more likely to have health problems, often more than one problem or chronic condition. Some of these health problems appear to be the result of an accumulation of damage over a lifetime. For example, exposure to the sun damages the skin and may result in wrinkling or skin cancer. Sun exposure also appears to eventually result in cataracts. Improper diet and lack of adequate exercise over a long period of time also appear to result in health problems. Tobacco use over time damages organs and may lead to cancer. In sum, not all health effects are the result of growing chronologically older, but may reflect the accumulation of damage over many years.

## Housing

Older people are faced with many choices as they approach retirement. Should they remain in their community or country? Move to a warmer climate? Live near to or far from their children and grandchildren? Live in an adult community? Invest in a continuing living community? Should they modify their home now to accommodate wheelchairs and walkers that may come in later life?

It appears that a growing number of young people are living with their parents into their twenties and even thirties, and there are clearly a growing number of grandchildren living with or being raised by grandparents. These trends may keep middle age and older people in their family homes longer, with downsizing occurring later in life.

## Social

Family involvement is very common among older people, and grandchildren are considered to be very important to most. Large numbers of grandparents provide care and support for their grandchildren, others provide care for spouses, relatives and friends who are in later states of life and unable to care for themselves.

Older couples often work together as a team, each helping the other as needed. As one develops problems with vision, strength, mobility, memory or other ability, the spouse provides support in those areas. In some cases, people are able to continue living apparently independent lives only because a spouse is providing support.

For most individuals, the immediate family is within the closest or most intimate social circle, sometimes visualized as the “bulls-eye” on a target or an image of nested circles. Close friends are in the next circle, while professional advisors, business and social acquaintances are in a third or fourth ring from the centre.

## Community involvement

People of all ages may become involved in their communities, but older people who are retired have more discretionary time that they may be willing to contribute to their communities. Older people are found in a variety of positions as community volunteers, often working within local or national organizations to help children or people who appear less fortunate.

## Transportation

Driving is a critical part of life for many people in the United States and other countries. There are large areas that do not have adequate public transportation available to provide for the needs of people who do not or cannot drive an automobile. At the same time, many cities and communities are designed around private autos, making it difficult to go to grocery stores, medical appointments or other locations for non-drivers. Reaching the point in life where an individual should or must stop driving is very difficult, and ready options are not always available.

Reliable public transportation is simply not available everywhere. Older people sometimes relocate to residential facilities where transportation is provided in order to have reliable transportation available. In lesser-developed areas where walking or animals are important modes of transportation, the distance an individual lives from needed supplies or services can become important to survival.

Observation of people in all stages of life suggests that the six domains have several attributes, including

- The domains are generalizable to all human beings of all ages
- The domains are a part of life, and exist from birth through death
- Each domain is a dynamic force in an individual's life
- Any domain can be a driving force

It was also apparent that life events each occurred within one of the six domains

### **Major life events**

For older people, many of life's important events are related to health, whether one's own health or a spouse's health. The events that appear to have the greatest impact on individuals are their own serious illness or the death of a spouse. The death of any family member, whether child, parent, sibling or other relative can also have a strong impact on an individual at any age. Older people also suffer the deaths of friends, sometimes feeling lonely because most of their friends have died.

In addition, older people have health events, such as a heart attack, stroke, or loss of vision, which may change the direction of their life. Yet there are also positive events that continue to occur, as children marry, grandchildren and great-grandchildren are born and families of descendants continue to grow.

What constitutes a major event in life depends somewhat on perspective. To a teenager, a driver's license is a turning point event, and a failed romance or even a social embarrassment can appear to be life changing at the time, yet becomes unimportant when viewed from later in life. Unfortunately, young people sometimes over-react to an event because of their short-term view and emotional perspective of an event. The short-term perspective can affect people at all ages, suggesting that a long term perspective and understanding of life events may be useful.

This lack of perspective or long-term view may be in part because some events are not recognized as being turning points at the time they occur. The decision to drop out of school; an offense that leads to legal action or confinement; an attempted suicide; a child or grandchild moving into your home, as a child or as an adult; all may have long lasting impacts on the individual, children, parents, grandparents, and others, but those impacts may not be recognized before the event. Further, it appears that many people underestimate the long-term impact or consequences of turning point events, even when they are recognized as such.

Just as the interviews brought depth to the research, observation provided a broad perspective on life, noting interactions and common elements between individuals and social groups. It was notable that people share many qualities and events whether

living in a luxury home in California, a flat in London, a mud hut in Somalia or a mobile home in Texas. Some of those shared aspects of life are the basis for the life stages, personal domains and major events discussed here.

When combined with an interview, observation added a second and more objective viewpoint of the individual's life, including interactions with family members, changes in the person's life or personality after a serious illness such as a stroke and the visible changes as a person moved from one life stage to another.

The observations of individuals, groups and communities suggested and later reinforced the concept of a life model composed of life stages, personal domains and major life events, suggesting that such a model was generalizable to all ages and all societies.

### **4.3.3 Survey results**

Survey results are quantitative in form and appearance, but the numbers may, as in the case of this research, represent qualitative data. This section details the results of the systematic survey described in the previous chapter in section 3.3.3. The survey questions were derived primarily from the interviews and observations, and sought to generate new data in areas where interviews and observation had reached saturation. A systematic survey with a random start (Babbie, 1995), described in section 3.3.3, was conducted of Seniors' Choice members in January 2002. Several trial surveys were conducted earlier that provided guidance to the development of questions for the systematic survey as well as offering experience with survey methods. Results from each of these trial surveys are included in Appendix B. Some of the trial surveys were conducted in part to test the survey process, and some of the questions that were asked are more pertinent to presenting the results than to research questions. Some questions that seemed interesting or important when they were written later appeared irrelevant to the research. Yet the trial surveys had specific purposes at the outset, which included:

- To learn survey methods and gain experience in conducting surveys
- To test potential questions for a larger survey
- To gain greater experience with mailing systems
- To gain experience with the SPSS software

In achieving these purposes, the trial surveys were of substantial benefit to the research because they also provided substantial data. Although the trial survey participants were self-selected and no conclusions could be drawn from the collective results, each completed response contained data from one person. Many respondent added comments that offered additional insights.

## Quality of the survey data – Systematic sample

This survey of a systematic sample with a random start (Section 3.3.3.3, Research Survey) selected 400 people from a population of approximately 3300 people (Section 3.3.3). The sample yielded a return of 186 valid responses, a response rate of 46.5%. Considering the common areas of the population including age, community, health interests and other factors the population was judged to be less varied than general populations and the sample was calculated to have a sampling error of plus or minus 10% with a confidence level of 95% (Salant & Dillman 1994).

Several survey questions were open-ended, asking the respondent to draw on experience and memory of events since the age of sixty. In the case of the questions asking about major life events, responses may have been affected by a number of factors. Some respondents were still in their early sixties and others were in their nineties, leaving a substantial variation in the probable number of events that had occurred. Responses may also have been affected by more recent events or by the lack of major events when younger. Finally, responses to this type of question are affected by individual attitudes at the moment the survey is completed and toward the survey itself. Some people were clearly conscientious in their replies, trying to be helpful while others provided only minimal responses.

### 4.3.3.1 Research subjects

The following demographic information about the respondents is derived solely from the responses to the systematic survey. Percentages are determined by actual responses to each question, disregarding non-responses. Where percentages are shown, the number of responses upon which the percentages are based is shown in each table as, for example, (n=186).

#### Ages of respondents

The ages of the respondents to the systematic survey ranged from age 61 to age 94, as seen in the accompanying table and graph.

Range	61 to 94
Mean age	76
Median age	78
Mode age	80

*ages of respondents*

*Figure 4.2 Average*



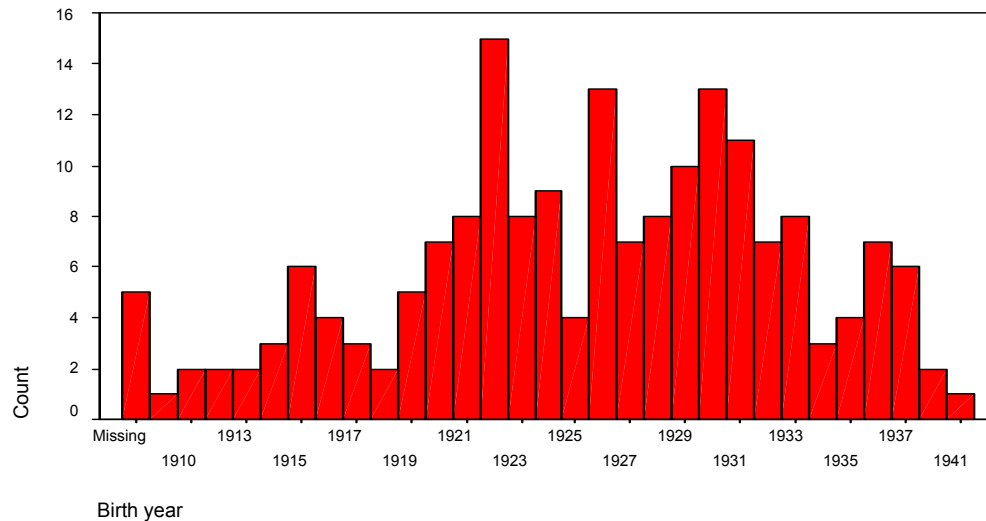


Figure 4.2a Graph showing distribution of respondents by birth year

The graph displays the respondents' birth years, as the questionnaire requested the year of birth rather than the respondent's age or birth date. The first space on the left of the graph represents five people who did not answer this question.

### Gender

The gender makeup of the respondents to this survey indicated approximately two females for every male. When compared to the national statistic for all women and all races for age 65 and over for the entire United States, the percentage of female respondents was 7% higher than the national figure and the males a corresponding 7% lower. (Administration on Aging, 2001).

Sex	Respondents	Percent (n=167)	U.S. population over 65
Female	110	66%	59%
Male	57	34%	41%
No response	19	--	

Figure 4.3 Respondents distribution by sex

### Marital status

Of the 186 respondents, 64% were married and 28% were either widows or widowers in 2002. For comparison, 56.5% of people over 65 in the U.S. in 2000 were married and 32.5% were widows or widowers. It is important to note that the national statistics are for a population above age 65, while the percentages for the systematic sample are based on a population over age sixty.

Marital status	Respondents	Percent (n=184)	U.S. population over age 65, 2000*
Married	118	64.1	56.6%
Divorced	10	5.4	6.7%
Widow(er)	52	28.3	32.5%
Never married	4	2.2	4.3%
No response	2	--	---

\*(Federal Interagency Forum on Aging Related Statistics, 2000)

*Figure 4.4 Comparison of survey respondents' marital status with the marital status of the U.S. population over age 65.*

#### **Highest level of education achieved**

<b>Education level</b>	<b>Respondents</b>	<b>Percent n=184</b>	<b>Cumulative % achieved</b>
Grade school	4	2	99
High school	62	33	96
Some college	74	40	66
Batchelor's degree	29	16	24
Master's degree	12	7	8
Doctoral degree	3	1	1
Other and no response	2	1	NA

*Figure 4.5 Education levels achieved by respondents*

The numbers in this table represent a relatively high level of education among the survey respondents. In 1998, of the U.S population over age 65, approximately 67% held a high school diploma as compared to 96% of the sample respondents.

Approximately 15% of the U.S. population over age 65 held a degree at bachelor's level or higher (Federal Interagency Forum on Aging Related Statistics 2000) while 24% of the sample held bachelor's degrees or higher. Based on the assumption that education is an indicator of "higher incomes and higher standards of living," (p.6) this statistic appears to support the field observation that the majority of this population is in the financial middle class or above. The assumption that there is a direct relationship between education and income is illustrated by the fact that median U.S. household net worth where the head of the household was over age 65 with no high school degree was \$63,100.00. Heads of households over age 65 with only a high school degree had a median net worth \$157,400.00 and those with some college or more (66% of the sample) had a median net worth of \$301,000.00 (Federal Interagency Forum on Aging Related Statistics, 2000).

Because of their association with Valley Baptist Hospital, it can reasonably be inferred that the population from which this sample was drawn has a particular interest or concern with their health. No questions were asked relating to race or income in these surveys but field observation indicates that this population is predominantly Caucasian, is primarily of the financial middle class and includes a substantial number of members who live in Harlingen less than half of each year. The city of Harlingen and the surrounding area include a sizable Hispanic population, which is not reflected in the Seniors' Choice membership.

#### **4.3.3.2 Survey research results**

This section describes the data from the systematic survey. Several trial surveys were conducted in advance of, and in preparation for the systematic survey. The results of

the trial surveys that were conducted in 2000 and 2001 are in Appendix B. The results and analysis of the systematic survey that follows are organized by research question.

This survey of a systematic sample with a random start selected 400 people from a population of 3300 people (section 3.3.1). The sample yielded a return of 186 valid responses, a response rate of 46.5%. Considering the common areas of the population including age, community, health interests and other factors the population was judged to be less varied than general populations and the sample was calculated to have a sampling error of plus or minus 10% with a confidence level of 95% (Salant & Dillman 1994).

#### **4.3.3.3 Survey results- Life stages**

The initial research of the literature found historic information about life stages, but found the data for stages after age sixty was inadequate for personal futures research. The interviews, observation and literature of geriatric medicine provided data that led to a concept that four potential life stages after age sixty could be identified as:

- Independent stage
- Vulnerable stage
- Dependent stage
- End of life stage

To test this concept, the survey asked this sample of people over age sixty for their opinions about the validity of the four stages based on their personal experience and observation. The decision to survey this population was based on the assumption that as members of the involved age group, they would have direct knowledge of these stages if, in fact, the stages existed.

In the 2002 survey of Seniors' Choice members, respondents were given a brief explanation in the questionnaire followed by four choices and an opportunity to comment. The explanation and choices of answers were stated as:

My research to date suggests that there are four stages in life after age sixty. They are not related to chronological age, they are sequential, but a stage may be skipped and sometimes reversed, returning to an earlier stage. Briefly, they are:

Independent Stage- Able to manage and enjoy most aspects of life.

Vulnerable Stage- Difficulty handling some parts of life. May have multiple chronic illnesses and multiple medications.

Dependent Stage- No longer able to handle everything. Need help with some daily activities such as bathing, eating, using the toilet, etc.

End of Life Stage- Terminal diagnosis or terminal stage of an illness.

Based on your experiences and observations of those around you, do these descriptions of life stages:

- a\_\_ Represent life after 60 accurately
- b\_\_ Seem OK
- c\_\_ Don't really represent realities of life after 60

d\_\_ Don't make any sense at all

## Results

The responses to this question were:

Response	Respondents	Percent (n=186)
Represent life after 60 accurately	86	46.2%
Seem OK	69	37.1%
Don't really represent realities of life after 60	15*	8.1%
Don't make any sense at all	1	.5%
No reply	15	8.1%

\*Of the 15 respondents who selected "Don't really represent realities of life after age 60," 13 added comments suggesting that the stages should be applied to an older age, such as 70 or 80, indicating a misunderstanding of the question. No adjustments were made to the data or the results based on that information

*Figure 4.6 Responses to question about proposed life stages relationship to real life*

## Analysis

A substantial majority (83.3%) of respondents found the suggested life stages to be "OK" or to "represent life after 60 accurately." Some respondents added comments indicating that they lived or worked with people over 60 and could see these stages in everyday life. A few people misunderstood the question and suggested the stages should start at a later age than sixty. This misunderstanding of the question suggests that clear explanations are important, as illustrated by responses to the same question asked of a focus group after a detailed explanation of the same life stages. Of that audience (see 4.3.1.3), 90.5% found these four stages to represent life after age 60 accurately and 9.5% marked "OK".

### 4.3.3.4 Survey results– Personal Domains

The survey addressed personal domains in a limited manner, including questions about housing and care in the event the respondent should require long term care. The question on housing is concerned with where the individual prefers to receive care. The question relating to care asks about the individual's preferences as to who will provide care.

## Housing

One question on the systematic survey was concerned with housing in the event the individual required care, asking:

*If you become unable to care for yourself, which options do you expect to use?*

Respondents were asked to rank their answers in order of preference, number one being the highest preference. The responses all relate to where the respondent would prefer to receive care, if care should become necessary.

## Results

There are some clear patterns seen in the table below. The majority of the respondents preferred to receive care in their homes (65%), the majority second choice was assisted living (41%) and the third choice was a nursing home (27%).

(n=186)	First	Second	Third	Fourth	Fifth	<u>Not a choice</u>
Receive care at home	65%	3%	1%	0%	0%	32%
Move to a child's home	2%	7%	3%	3%	2%	83%
Move to a friend's home	0%	1%	0%	4%	4%	91%
Move to assisted living	28%	41%	4%	1%	0%	27%
Move to a nursing home	4%	15%	27%	1%	2%	51%
No choice entered	0%	33%	66%	91%	92%	

*Figure 4.7 Preferences for location to receive care*

## Analysis

This table brings the data into sharper focus than a simple listing of the responses. The last column indicates that several of the choices are not considered options by a large number of respondents. Although 65% of respondents indicated their first choice would be to receive care at home, 32% indicated that receiving care at home was not an option they would consider. It is significant that 91% of these respondents indicated they would not consider moving to a child's home at this time and 51% do not want to receive care in a nursing home. It was noted that this was a cross sectional survey and that any of these answers may change with time and circumstance. In some cases the choices of a location for care will be made by other persons, including spouses, children, social workers and medical professionals. In other cases, i.e. people already living in continuing living or assisted living facilities, the choices have already been made.

Although every respondent made a first choice, one third of respondents did not make a second choice and two thirds did not make a third choice.

One prospect that was not clear from the table was the possibility that some of these individuals viewed care location as a progression from home to assisted living to nursing home. Field research and comments in the questionnaire suggested this possibility and this table supports that interpretation. Also, it was known that some of the respondents were already in continuing living facilities that include such a progression.

## **Health-Care**

One question on the survey was concerned with care for the respondent in the event of serious long-term health problems, asking:

*If you choose to be cared for at home, who would provide the care?*

Respondents were asked to rank their answers in order of preference, number one being the highest preference. The responses all relate to who the respondent would prefer to provide care, if care should become necessary.

## Results

<b>(n=186)</b>	<b>First choice</b>	<b>Second choice</b>	<b>Third choice</b>	<b>Fourth choice</b>	<b>Fifth choice</b>	<b>Sixth choice</b>	<b>Not a choice</b>
Spouse	44%	4%	0%	0%	0%	0%	52%
Child	8%	9%	6%	1%	0%	0%	76%
Grandchild	1%	2%	2%	2%	0%	0%	93%
Friend	1%	2%	1%	2%	2%	1%	92%
Professional	31%	37%	3%	1%	0%	0%	28%
No care at home	11%	4%	2%	1%	0%	1%	81%
No response	4%	43%	86%	94%	98%	98%	

*Figure 4.8 Preferences for personal care provider*

## Analysis

In the First choice column, the respondents' preference for care at home is divided primarily between the spouse (44%) and a professional caregiver (31%). The First Choice column also indicates that 11% of the respondents would choose not to be cared for at home and 8% would prefer to be cared for by a child. The response rate for this column is 96% as most respondents selected a first choice.

In the Second choice column, 43% of the respondents chose not to select any answer, 37% preferred a professional caregiver and 9% selected a child as their caregiver. The Third, Fourth, Fifth and Sixth choice columns do not provide meaningful data other than indicating that the real choices lie in the first two columns. The final column suggests which choices are least likely to be considered and which choices may not be available. Although there is no statistical evidence here, it is reasonable to assume that some of these choices for both of these questions are made in view of the individual's present status. If the individual has no spouse, child or grandchild, then the choices are more limited. If an individual is already living in an Assisted Living facility, the responses will differ from those of an individual living at home with a spouse.

For example, 52% of the respondents appear to choose not to be cared for by a spouse, but the reality may simply be that those respondents: a) have no spouse, b) the spouse is not capable of providing care, c) the respondent is already in a professional care facility, or d) another choice. Since 63.4% of the respondents were married at the time of the survey, at least 19.4% of those who were married at the time of the survey had either already committed to another choice or preferred one of the other choices. An important statistic here is that a clear majority (75.4 %) of those respondents that were married at the time of the survey selected their spouse as their preferred caretaker. Respondents were not asked if they had a child available to provide care. A common thread among the comments was that people wanted to spare

their children the problems associated with care. One woman commented about this question, “I love my children and they love me and I want to keep it that way.”

In the first choice column, 31% of the respondents preferred to be cared for by a professional and 11% stated they would prefer not to be cared for in their own home. Some respondents added comments indicating that their choices reflected a desire not to be a burden on spouses, family or friends if they became dependent. Again, an unknown factor here is the number of persons whose decision has already been made. Some respondents may already be living in assisted living facilities or with children or have already made arrangements to do so.

#### **4.3.3.5 Survey - Major life events**

In the 2002 systematic survey of Seniors’ Choice members, respondents were asked two open ended questions related to important or major life events. The responses were separated into a number of categories that are listed here under their respective questions along with the percentage of respondents who mentioned that category. The intent of these two questions about “Best” and “Worst” life events was to obtain an insight into what individuals over age sixty considered to be the important events of their life, both positive and negative. It was understood that the information gained would not be conclusive but would have to be refined before it provided much value. The next step for this information was discussion and analysis in focus groups (See 4.3.6).

#### **Survey question:**

Since age sixty, what are the best events that have happened in your life?

#### **Results**

<b>Response</b>	<b>Respondents</b>	<b>Percent (n=186)</b>
Travel	47	25.3%
Retirement	35	18.8
Coming to the Rio Grande Valley	33	17.7
Family or friends	28	15.1
Discretionary time	27	14.5
Grandchildren	25	13.4
Marriage or remarriage	13	7.0
Other activities	9	4.8
Fiftieth anniversary	7	3.8
Good health	7	3.8
Still alive	6	3.2
Hobbies and sports	6	3.2
Work	6	3.2
Religion	5	2.7
No answers	20	10.8
No important events	6	3.2

*Figure 4.9 Best events after age sixty*

## Analysis

Fourteen percent of the respondents either did not respond to this question or had not experienced any “best” events that they considered worthy of a response. Some of the responses dealt more with states (Still alive, Good health), relationships (Family and friends) or changes (Discretionary time) rather than events in the strict sense, but reflected the respondents’ views of what was important. This also reflects the value of open-ended questions, as this type question frees the respondent from the limitations that a researcher may place on his or her own thinking when designing questions and responses. The trial surveys included questions about major life events that asked the respondents to choose from listed events, which limited the range of responses. In this survey, the open-ended questions brought out a broader range of responses, but also resulted in a high number of non-responses (20 “Best event” and 15 “Worst event” non-respondents).

Several of these events represent turning point events in life. Retirement, marriage or divorce each changes the state and direction of one’s life. Milestone events, such as “Fiftieth anniversary” mark an achievement or the passage of time. Most of the events listed represent a change in the respondent’s life. Travel is the most frequently mentioned event (25.3%) followed by retirement (18.8%). The demographics for the respondents who listed travel as a “best” event were very similar to those of the sample population.

It was surprising that more people did not consider retirement a “best” event, but there are some possible reasons. Two thirds (66%) of all respondents in the sample were female, and many of these women are of an age where women generally did not have careers, so they also did not retire. In addition, people who were forced to retire because of their age may not view retirement as a positive event. One respondent indicated she had retired early to care for family, and considered that a mistake.

### **Retirement as a “best” event**

<b>Gender</b>	<b>Respondents</b>	<b>Percent (n=31)</b>	<b>Sample percent Gender</b>
Female	14	45	66
Male	17	55	34

*Figure 4.10 Retirement as a best event after age sixty by gender*

<b>Age</b>	<b>Range</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
Retirement responses	65 to 86	74	73	69
Sample	61 to 94	76	78	80

*Figure 4.11 Retirement as a best event after age sixty by age*



Four respondents of the 35 people who indicated that retirement was a “best” event did not indicate whether they were male or female. Of the 31 respondents who also indicated their sex, 14 (45%) were female and 17 (55%) were male, a significant difference from the ratio of females (66%) to males (34%) in the total sample. This would infer that for this population, retirement was a more significant event for men than for women. No inferences were drawn from age, marital status or education.

“Coming to the Rio Grande Valley” included two categories of respondents. One group had moved to the valley and become permanent residents whereas the second group, known locally as “Winter Texans,” spends winters in the valley then returns home for the rest of the year.

Twenty-eight people indicated that family and friends were among their “best” events. Of the twenty-four who also included their gender, 22 (91.7%) were female and 2 (8.3%) were male, suggesting that women place a high value on their relationships with family and friends.

“Grandchildren” as an event also included two groups of respondents, as determined from comments, literature and field research. Many simply enjoyed being grandparents and spending time with their grandchildren, but some grandparents had become substitute parents, with full responsibility for raising their grandchildren.

Other than as noted above, variances in responses to these two questions from the sample demographics were unremarkable.

### Survey question:

The second question about major life events asked respondents about the negative events that have occurred in their lives.

Since age sixty, what are the worst events that have happened in your life?

### Results

Response	Respondents	Percent (n=186)
Respondent's illness	56	30.1
Death of a spouse	40	21.5
Deaths of family and friends	37	19.9
Spouse's illness	17	9.1
Other problems	10	5.4
World events (9/11)	8	4.3
Family problems	8	4.3
Financial problems	4	2.2
Being a caregiver	2	1.1
Divorce	1	.5
Loneliness	1	.5
No bad events	11	5.9
No answer	15	8.1

Total responses (excluding non-responses) 195

*Figure 4.12 Worst events after age sixty*

## Analysis

The death of one's spouse is a high impact event. In addition to the emotional impact of the death, there is often a loss of income, particularly for women, a substantial increase in responsibilities and a disruption of social relationships and social support. Women who are over 65 in the U.S. at this time are largely from generations that relied on the husband to work while the wife raised the children and managed the home. When men who have retired on pensions die, their pensions usually end, leaving the widow with a sharply reduced income. In addition, the percentage of women in a cohort tends to rise with age, reducing the probabilities of remarriage after the death of a husband. Among the respondents who listed death of a spouse as a "worst" event, 75% of those who responded and included a gender (40) 75% were women and 25% were men, a higher ratio of women to men than in the total sample. This infers that either more women than men in this sample lost their spouses to death or that more women than men considered the death of a spouse to be a "worst" event. In the United States, as in the rest of the world, women generally outlive men (Social Security Administration 1999). It is also common for women to marry men older than themselves, and these two factors combine to result in more women and widows within older age groups.

Three of the categories of "worst events" appeared to be overly broad, so were reviewed and broken down as follows:

### **Respondent's illness**

<b>Condition</b>	<b>Respondents</b>	<b>Percent (n=56)</b>	<b>Percent (n=186)</b>
Aches & pains	13	23.2	7.0
Surgery	13	23.2	7.0
Bad health	11	19.6	5.9
Cancer	7	12.5	3.8
Heart attack; stroke	4	7.1	2.2
Arthritis	2	3.6	1.1
Broken bones	2	3.6	1.1
Chronic diabetes or kidney	2	3.6	1.1
Vision or hearing loss	1	1.8	0.5
Auto accident	1	1.8	0.5

*Figure 4.13 Respondents' illnesses after age sixty as "worst" events.*

Some comments related to the "aches and pains" responses suggested that some respondents had not really experienced a major "worst" event. On the other hand, some answers are difficult to assess. Thirty percent of the respondents to the survey are included in the "Respondent's illness" category and all illnesses other than "Aches and pains" make up 23.1% of the sample, or 43 major illnesses or injuries. The important statistic here is that 23.1% of the sample had experienced a major illness or injury since age sixty. When compared with the entire sample, the variations of this category from the gender, marital status, age and education percentages were unremarkable.

## Deaths of family and friends

Relationship	Respondents	Percent (n=186)
“Loved ones”	20	10.7
Friend(s)	11	5.9
Parent	9	4.8
Child	6	3.2
Grandchild	3	1.6
Pet	2	1.1
Total responses	51	27.4

*Figure 4.14 Deaths of family and friends*

The term “Loved ones” could not be further refined and is presumed to include all the other categories. Note that the total number of respondents in this table exceeds the number listed under “Deaths of family and friends” as some respondents included more than one of the listed relationships in their response.

Only nine respondents listed “death of a parent” among their worst events after age sixty. It can be presumed that some parents died before the respondents reached age sixty, but it is possible that more than nine (plus a portion of “Loved ones”) of the respondents have experienced the death of parents since age sixty. If this is true, then for some people the death of a parent was not one of their worst events. It is possible that the stress value of an event may be mitigated by the timeliness (i.e. the parent is very old) of the event or by the age and experience of the respondent.

## Spouse's illness

Condition	Respondents	Percent (n=186)
Aches & pains	6	3.2
Heart attack, stroke	4	2.1
Brain disorder	3	1.6
Cancer	2	1.1
Lung disease	1	.5
Surgery	1	.5

*Figure 4.15 Spouse illness*

Only 17 respondents cited their spouse's illness as a “worst” event. A disproportionate number (82.3%) of these respondents were women. This is a small number from which to draw a conclusion, but if the proportion were in a larger sample it might infer any of several possibilities:

- 1) women are more sensitive to their spouse's illnesses
- 2) men experience more serious illnesses
- 3) women are more affected by their spouse's illness, possibly through care-giving

With these small numbers, all these possibilities are speculation, but they provide a basis for discussion of spouse illnesses and their impacts in the focus group session (See 4.3.6)

The remaining questions and the demographic results have been moved to the end of Appendix B in order to reduce the bulkiness of the survey data in this chapter.

The surveys introduced an opportunity to explore questions, add data, gain insights and gather opinions about different aspects of the research. Specifically, the survey results provided two new lists of events, positive and negative, that the respondents considered important in their lives. In addition, the respondents supported the concept of dividing “Old age” into four distinct stages. Finally, the survey revealed some positive attitudes toward ageing and specific preferences toward long-term health care. Additional information was gained that added context and perspective to life after age sixty.

#### **4.3.4 Document study results**

A study of documents explored some of the rules and regulations that affect life after retirement. The documents studied (see 3.3.4) dealt largely with institutions and regulations in the United States, the concepts will be pertinent in many countries. For example, insurance stipulations are based on risk management and those concepts are shared throughout the insurance industry. Social security healthcare plans provided by governments are also based on risk management principles, and many elements are common to many countries worldwide. (Social Security Administration, 2002).

Document research was particularly helpful in defining the properties of some categories, particularly those of the life stages. In this area the brochures and contracts offered by institutions such as hospitals, assisted living facilities and nursing homes frequently defined the guidelines and eligibility for these facilities.

#### **Life stages**

People who are sick, dependent or dying are generally out of view and difficult to observe or interview. To learn more about these lives, statistics and documents were helpful. In search of support of observations of people living in the vulnerable, dependent and end of life stages, a search was made of statistics, industry reports and brochures to better understand life in these stages,

#### **Vulnerable stage**

The Instrumental Activities of Daily Living (Reuben et al. 2000) and (Section 2.3.1.1) appear to be the best available measure for defining or identifying vulnerability to becoming dependent. This standard was selected for identifying or confirming that a person is in this stage because it is a standard that is well known and already in common use in the practice of medicine.

Assisted living facilities are designed to help people with physical and/or cognitive limitations, but who still have some means of mobility and the ability to follow instructions. Study of laws, brochures and other documents clarified the role of assisted living facilities in the care of people in the vulnerable and dependent stages.

If, for example, a patient becomes permanently bedfast, the patient will be moved to a different type of care facility, typically a nursing home, acute care facility or hospice (Texas Department of Human Services, 2000).

### **Dependent stage**

A study of long term care insurance documents (National Association of Insurance Commissioners 1999) indicated that the typical requirement to qualify for benefits was the inability to perform at least two (Texas Department of Insurance, 2000) of the Activities of Daily Living (Reuben, et al. 2000) and (Section 2.3.1.1). This suggested an easily recognized defining boundary for the dependent stage as the inability to perform any two Activities of Daily Living. Many people meeting these criteria receive care at home or in an assisted living facility (Assisted Living Federation of America, 2002), but a large number receive care in a nursing home.

### **End of life stage**

Study of Medicare documents revealed that Medicare pays for hospice benefits only after the patient's doctor certifies that the patient is terminal with less than six months to live and the patient agrees to accept only palliative care (Centers for Medicare and Medicaid Services, 2003). This suggested the boundary to identify the end of life stage as being a terminal diagnosis and that this stage typically is limited to the last six months of life.

It appears to be significant that there is a substantial difference between life in an assisted living facility and life in a nursing home, which at first suggests that these institutions represent two different stages of life. In fact, the assisted living facility cares for both vulnerable and dependent stage patients. In the United States, state and federal regulations and payment policies appear to differentiate between assisted living facilities, acute care facilities and nursing homes (Texas Department of Human Services, 2000) and (Centers for Medicare and Medicaid Services, 2003).

### **Personal domains**

The document study was particularly pertinent to the domains of Health and Finance.

#### **Health**

Government sponsored health insurance programs, such as Medicare in the United States, are an important part of life for older people. Medicare provides hospital insurance at no cost and medical insurance for a reasonable fee for most citizens over age sixty-five (Centers for Medicare and Medicaid Services, 2003) and (Health Care Financing Administration, 2000), so it is important for people to understand the provisions in the documents that describe and explain the program.

“Medi-gap” is a term for insurance (Health Care Finance Administration, 1999) that pays some of the medical costs not covered by Medicare. The individual pays the premiums directly to the insurance company. Long-term care insurance is not included in Medicare, but is offered by private insurance companies (National Association of Insurance Commissioners, 1999) and paid for by individuals.. Medicaid is medical insurance provided by each of the states in the United States to residents with limited income and assets (Centers for Medicare and Medicaid Services, 2004).

## Finances

In the United States, retirement funding has many components that vary with each individual. Most people who have been employed are eligible for full Social Security retirement benefits after age sixty-seven, up from the previous eligibility age of sixty-five for people born in 1937 or earlier (Social Security Administration, 1999). Around the world, eligibility age ranged from a low of age fifty for men and women in Kiribati and Kuwait to a high of age sixty-seven for men and women in Denmark, Iceland, Norway and the United States (Social Security Administration, 2002). In most countries, retirement benefits under the social security system are related to employment, which infers that one must be employed in a position where the employer pays taxes into the social security program and for a long enough period of time to qualify for benefits.

Many people will receive payments from company pension funds (Internal Revenue Service, 2004), and some from their own privately funded pension plans. Some people will have both types of pension available, and both are affected by government regulations. In the United States, individuals are permitted to set up and contribute to personal retirement plans (Department of the Treasury, 1999) that grow tax free but have a number of restrictions. For example, funds cannot be withdrawn before age fifty-nine-and-a-half without penalty, but the individual is required to begin regular withdrawals by age seventy-and-a-half (Internal Revenue Service, 2004).

Many states and taxing entities permit people over sixty-five the opportunity to freeze or reduce their taxes (Comptroller of Public Accounts, 1999). In most cases, it is the responsibility of the individual to be aware of these benefits and to apply for them.

## **Life events**

### Retirement

Reaching the designated legal age of retirement, whether or not the individual actually retires at that time, is an important event involving a number of rules and regulations, including enrolment for government social security benefits (Social Security Administration, 1999), enrolment for medical benefits (Health Care Financing Administration, 2000), application for pension benefits, application for tax limitation or reduction (Comptroller of Public Accounts, 1999), social services and other programs. In most cases, the individual is responsible to learn about and understand the regulations and make applications at the appropriate times.

## Legal documents and Instructions to physicians

When a person is seriously ill or experiencing an emergency, it is unlikely that the person can make well-considered decisions at that time. If the person has died, it is too late to make decisions. For this reason, there are several legal documents available that help to make the individual's wishes known so that decisions can be made in advance. Following are a few common instructions and documents:

*Do not resuscitate*- Instructs physicians not to attempt resuscitation in specified situations (Texas Medical Association, 1999) and (American Medical Association, 2002).

*Do not hospitalize*- Usually for nursing home patients, instructs physicians and staff not to hospitalize the patient. (Texas Medical Association, 1999).

*Medical Power of attorney*- Authorizes a named individual to make medical decisions on behalf of the patient (Texas Medical Association, 1999).

These documents, if considered and prepared when a person is healthy, provide a means of preparing to deal with the future.

*Will*- Authorizes settlement of accounts and distribution of assets at death.

Document study provided an opportunity to explore specific details of the regulatory, legal and medical areas that define and impact life after age sixty. This portion of the research contributed to identifying logical boundaries between the life stages and anticipating beneficial strategies for the future.

#### **4.3.5 Field research of health care facilities - results**

Field research helped to fill out the image of the last four stages of life. The research consisted largely of visiting facilities where older people live, receive medical care and short or long-term personal care. The research explored the functions of the facilities, relationships to life stages and varying levels of quality between facilities. It was helpful to keep in mind throughout this research that hospitals, nursing homes and other care facilities are no longer supported by religious and other charitable organizations as they once were, but that each of these facilities is a business striving to make a profit. As a consequence, observation suggests that compassion is sometimes outranked by cost.

##### **Life stages**

Continuing living facilities offer residents a private residence where they can live while they remain independent, yet with the option to have meals in a community dining room and be transported in facility-operated vehicles. If a resident requires additional care or assistance, it may be provided at home or in the facility assisted living area. If greater care is required the resident can be moved to the facility nursing home. Although continuing living appears to be a good concept for older people, initial investment and monthly expenses are generally high for the average person.

Assisted living facilities generally provide a home-like atmosphere, with private or shared rooms, community dining and a variety of activities. Assisted living facilities usually require that residents be mobile, whether walking, using a walker or wheelchair. Some facilities specialize in Alzheimer's patients. In the first half of the twentieth century, the term "nursing home" or "old folks home" would have included the services offered by assisted living facilities. Because of the number of nursing homes with low standards of care at that time, an opportunity arose to market assisted living facilities that looked and smelled clean and comfortable. Under Medicare regulations and increasingly restrictive payment terms to nursing homes. An increasing number of patients in nursing homes require bed care, while healthier, mobile patients are opting for home care or assisted living care.

Nursing homes provide complete care to people who cannot care for themselves. Nursing homes vary greatly in size, appearance, cost and quality of care. Although nursing homes are regulated by state and federal agencies, there is a substantial range of quality variation in nursing homes. Some are home-like, but many have an

institutional appearance. Some are bright and clean while others seem gloomy, a few having a persistent fragrance of urine and disinfectant.

Many nursing homes use physical restraints to keep patients in their beds, justified to prevent falls or injuries. The great range of quality differences between nursing homes has led Medicare to create an on line database that allows users to compare nursing homes based on information from mandatory inspections. Information about U.S. federal nursing home inspections is available on the Internet

([www.medicare.gov/NHCompare/home.asp](http://www.medicare.gov/NHCompare/home.asp)), providing basic information about the nursing home, number of patients, certifications and owners. More importantly, the site discloses information from the most recent inspection and compares much of that information with state and national averages. Included in the inspection report information for each nursing home:

- Percentage of residents with physical restraints
- Percentage of residents with pressure (bed) sores
- Percentage of residents who are bedfast
- Deficiencies found at last inspection
- Breakdown of nursing staff hours per day per patient

Accurate, current information can be very helpful for individuals or families who must consider or prepare for this care alternative. Brochures, personal visits and checklists may be helpful, but the brochure won't tell the reader if this facility has 30% of its residents in restraints, while other facilities have none.

Some information is beginning to appear on the Internet for rating or comparing hospitals and assisted living facilities. In addition, many facilities, including adult day care centres, have their own web sites that provide further information

Adult day care facilities provide activities and assistance during the day. This is important to families caring for parents or an older relative, as adult day care centers provide care for elders while the family is at work and at school. Many of these facilities operate vans with wheelchair lifts that pick clients up in the morning and return them home in the evening.

### **Personal domains**

The above-described facilities also pertain to the personal domains of health, housing, activities and transportation. Financial resources are also an important factor that often determines the affordable quality level of any of these facilities.

Field research of health care facilities supplied context to the lives of older people, their homes, neighborhoods, recreation areas, medical facilities and care environments. Several of the individuals who were interviewed mentioned their experiences with medical care and long term care facilities. This field research provided a better understanding of those experiences.



#### **4.3.6 Focus groups**

One of the risks of the sole researcher who doesn't have the opportunity to debate values and concepts with colleagues is that it is possible for an idea or concept to develop greater importance in the mind of the researcher than it deserves. In addition to generating new data, focus groups can help the researcher maintain balance and perspective with reality. At the same time, there is a risk that people in a focus group will give responses that they believe the researcher wants to hear. For this reason, when focus groups were asked for an opinion on a concept, positive responses were treated as "failed to reject" rather than as a strong validation of the concept, and meant that the concept would be taken to another level such as publication in peer reviewed journals for validation. The focus groups are each defined and described in detail in section 3.3.6.

The Seniors' Choice focus group discussed and ultimately affirmed that the proposed concept of four potential life stages after sixty appeared to be realistic and consistent with real life as witnessed and experienced by the participants. This was viewed as a valuable step toward validation of this concept.

The focus group composed of Leeds Metropolitan University PhD. students and faculty agreed with the concept of four life stages after age sixty, but suggested stronger emphasis on the boundaries between stages. The concept of six life categories was accepted as realistic, and the concept that some life events can be anticipated was also accepted.

The focus group composed of UHCL graduate students in Futures Studies and faculty was in accord with the concepts of life stages, six personal domains, and anticipation of life events. The concept of building a personal framework as a basis for developing personal futures was also discussed and accepted by this group of futurists. The group agreed that futures methods including scenario development and strategic planning appeared to be both scalable and appropriate to the study of personal futures.

Focus groups brought individuals together to discuss ideas and concepts raised by the research and to provide discussions of the researcher's impressions, concepts and conclusions. In each case, the focus group members were asked to judge each concept and its relativity to real life.

#### **4.4 Concepts arising from data and categories**

Glaser writes that "By far the most exciting use of grounded theory over the last ten years is its legitimating of concept generation" (Glaser, 1998 p. 133). Concepts arose during the research, primarily in interviews and observation, and were supported, improved and in some cases discouraged in the other methods. The use of multiple methods allowed ideas and concepts to be viewed from multiple viewpoints, and in the surveys and focus groups, to address some concepts directly. This section discusses some of the concepts derived from the research process that are expected to contribute to a practical model for developing personal futures.

Grounded theory methodology takes the researcher through a number of steps to develop raw data into concepts. Each of the concepts discussed here and again in

Chapter 6.0 emerged from the data collected from the various methods described in Chapter 3.0. As the data was collected, it was coded and compared with other data collected by the same method as well as that collected by other methods.

For example, “leisure travel” came up in a number of interviews with older people. Older people were also observed to be traveling from the northern U.S. to the southern U.S for warmer winters and were also observed in large numbers on cruise ships. In the surveys, older people listed “travel” as an important positive event in their lives. Because of the number of times that travel appeared in the data, it became a category. Later, the travel category was combined with a number of other categories that had one factor in common; they were things people did, activities. Other categories that were added to the activities category included school, work, sports, hobbies and religion. These combined activities appeared to represent a force, sometimes a motivating force, in people’s lives, and when compared to other categories, became one of six domains. This led to the concept of personal domains, discussed in 4.4.2.

This process of collecting and coding data, then comparing the codes to build categories and combining categories to build core categories resulted in each of the concepts discussed here. In the case above, starting with travel and ending with one of six domains, there was a point at which the realization came that these categories each represented forces that are present in each individual’s life from birth to death.

#### 4.4.1 Life stages- concepts

**Concept 1-**Life stages offer a valid basis for anticipating personal futures, and provide an opportunity for individuals to visualize a portion of their future. For example, a simple diagram can illustrate the stages of life that lie ahead for each individual. Any person can use the concept of life’s stages to view the next stage in life and each of the succeeding stages.

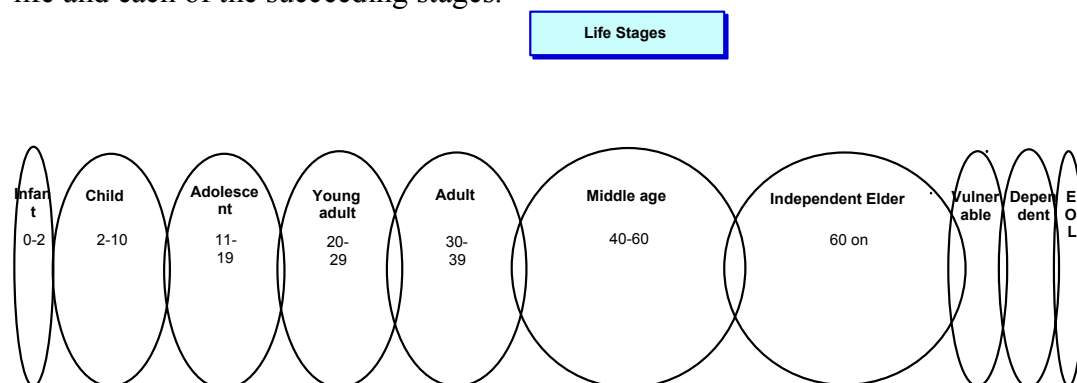


Figure 4.25 A diagram illustrating life stages

**Concept 2-** The stage of life referred to by Erickson (1986) as “Old age” is actually made up of four potential life stages, based largely on physical and mental health:

- Independent
- Vulnerable
- Dependent
- End-of-life

These stages are normally sequential, but stages may be skipped and in some cases a person may recover sufficient health to return to an earlier stage. For example, an individual in the independent stage may suffer a stroke that immediately places him or her in the dependent stage. A terminal diagnosis for cancer can also move an individual directly to the end of life stage. The word “normally” should be emphasized here, because sequence exceptions exist throughout life but are noted here because exceptions were found in the research.

**Concept 3-** When a child is born; an age gap is established between the child, its parents and its grandparents that will remain the same. If a mother is twenty years old when her child is born, there will always be twenty years between their ages. As grandparents, parents and children move through life, the life stages remain in parallel and can be anticipated for each generation, thus an individual observing stages and events in the lives of parents or grandparents can anticipate stages and possible events in his or her own future. Conversely, a parent or grandparent can, from experience, anticipate approaching stages and events in the life of a child or grandchild.

This concept deals with what appears to be mathematically obvious, but in discussions with individuals, it was apparent that this fact had never occurred to some people, nor had they seen how the parallels between generations related to the future. Recent articles in the media referring to the “sandwich generation”, those people who are caring for parents and children at the same time, are creating more awareness of this concept.

**Concept 4-** When a person moves from one life stage to another there is, in most cases, a major change in that person’s life, and in most cases that change cannot be reversed. This suggests that each life stage is in fact a personal paradigm.

#### **4.4.2 Personal domains- concepts**

**Concept 1-** Each individual lives life on multiple levels, managing several aspects of life each day. The data suggest six categories that exist in the lives of all humans, from birth to death. The six categories or domains are:

- Activities
- Finances
- Health and care
- Housing
- Social
- Transportation

**Concept 2-** These six personal domains contribute a different type of foreknown than the major life events or life stages, in that the categories are continuing forces in life and therefore dynamic. This fact opens up an individual’s life to analysis of each domain in terms of creating a time series for a domain, then using that time series to draw a trend line. From each of the trend lines, individuals have the opportunity to extrapolate into the future. An abstract example showing how a time series might be constructed for a personal domain is shown below.

### X axis- Identifying a time series

To create a time series for an individual, the X axis, or base line, can be drawn with any acceptable time interval in the individual's life, 5 years, 10 years or even by life stage. When conducting personal futures in groups, the facilitator could select one common interval for all.

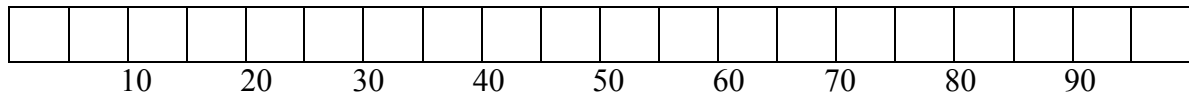


Figure 4.26 X-axis with intervals of 5 years, extending to 100 years.

### Y axis- Quantifying universal areas of life

To create a Y-axis, the individual must establish criteria for measuring the value of each of the categories at each time interval. Since objective measures may be difficult to quantify, individuals might adopt a subjective measure, for example, quality of life for each category as they best remember for each interval. Using a five interval rating of quality, the individual might rank each category from the following scale.

1. Very low
2. Low
3. Average
4. High
5. Very High

The workspace below shows the Y axis headings ascending from low to high with space for the individual to rank his or her level of satisfaction at every five or ten year period throughout life.

Quality Level	Age 10	20	30	40	50	60	70	80	90	100
Very High										
High										
Average										
Low										
Very low										

Figure 4.27 Workspace for creating a table of personal time series data

The weakness of the derived data lies in the fact that it is entirely subjective, but it can be argued that this is the individual's own data, prepared by and for the use of the individual, thus it is in the individual's interest to be as accurate as possible. Accuracy in the most recent decades of life is particularly important, as these years set the direction of the trend line. From this data and the resulting trend line, the individual

can project the line into the future, after considering the impacts of other trends or events, such as retirement. High and low projections may result in a cone shaped area of possibilities. With projections from all six categories of life in hand, individuals should be well prepared to consider plausible scenarios of the future.

**Concept 3-** Each domain is composed of sub-forces, any of which may become an important driving force in one's life. These sub-forces appeared first as categories, derived from interviews, which were combined to create the six domains.

<b>Activities</b>	School Career Work Sports Hobbies Travel Pastimes Religion
<b>Finances</b>	Income Expense Assets Debt Insurance Risks Estate Long term care
<b>Health</b>	Status Conditions Diseases Impairments Diet Exercise Medical care Personal care
<b>Housing</b>	Parent's home Own home Other homes Continuing living Assisted living Nursing home Hospice
<b>Social</b>	Family Friends Co-workers Business associates Organizations Community Advisors
<b>Transportation</b>	Personal (Walk, bicycle, motorcycle, etc.) Auto Public, local Public, long distance Other, special

*Figure 4.28  
Table showing  
examples of sub  
forces that may  
exist within a  
domain*

Thus, where the human lifeline may be divided into six domains, each domain is made up of multiple forces that impact an individual's life. Any of these sub-forces has the potential to become dominant.

#### **4.4.3 Major life events- concepts**

**Concept 1-** Some life events correlate with age or life stage. Understanding that some events are more probable at certain times of life offers the individual an opportunity to anticipate some portions of the future.

**Concept 2-** Some life events result from choices we make, and can also be anticipated. If we choose to marry, we may have children in a few years and grandchildren in another twenty to thirty years. If we choose to smoke cigarettes, we may experience serious health problems a few decades in the future.

**Concept 3-** Some life events result from events in the life of a close relative or friend, and some of these events can be anticipated. If a parent dies, that is an event in the child's life. If a child marries or divorces, that is an event in a parent's life. Good or bad events that occur in the lives of children and grandchildren are often events that impact the lives of parents and grandparents.

**Concept 4-** Some life events have multiple impacts. For example, the death of a parent may result in personal grief, bringing family members closer together, requiring personal responsibility to settle the parent's affairs, an inheritance or family disagreements over responsibilities and financial matters.

#### **Considerations for personal futures**

Life events were first drawn from interviews and observation, then supplemented by the surveys. As the concepts took form, literature disclosed research that had been conducted on the impacts of specific life events on individual lives (Holmes & Rahe 1967) and (Miller & Rahe 1997). Other literature explored various types of events (Tough, 1982) and the probability of the occurrence of events (Walsh 1998) and (Ropeik & Gray 2002). The following table illustrates some of the considerations of event for personal futures.

	<b>Considerations for Personal Futures</b>	<b>Examples</b>
<b>When</b>	When is the event likely to occur?	At what age or life stage? Has it already occurred?
<b>Type</b>	What type of event is this? <ul style="list-style-type: none"> <li>• Turning point</li> <li>• Life cycle/biologic</li> <li>• Legal</li> <li>• Intentional/choice</li> <li>• Unintentional</li> <li>• Other</li> </ul>	Marriage, children, divorce Growth, puberty, menopause Voting age, retirement age Marriage, children, divorce Deaths of family or friends Accident, job loss, anniversaries
<b>Impact</b>	What is the impact of the event?	<ul style="list-style-type: none"> <li>• Immediate</li> <li>• Long term</li> <li>• Severity</li> </ul>
<b>Probability</b>	What is the probability of this event occurring?	During one's life? During any particular time period?
<b>Domain</b>	Within which domain does an event occur? <ul style="list-style-type: none"> <li>• Activities</li> <li>• Finances</li> <li>• Health</li> <li>• Housing</li> <li>• Social</li> <li>• Transportation</li> </ul>	Complete education, start career Save or invest for retirement Exercise to maintain health Move to a different home Birth of a child Learn to drive a car

*Figure 4.29 Life events and considerations for personal futures.*

#### **4.5 Combining concepts to form a framework**

The purpose of the interviews, observations, surveys, focus groups and field research was to collect sufficient data about life to provide a foundation of foreknowns that could be used to help an individual anticipate changes and events in his or her future life. The dynamic of the framework emerged during the research with the emergence and development of the personal domains. Based on the core categories and the concepts discussed above, first a matrix, then the framework developed. The key concepts incorporated into the framework, restated briefly, include.

- Life stages provide a valid basis for viewing personal futures
- Personal domains represent ever-present forces in life that should be considered when exploring personal futures
- Personal domains hold the potential for extrapolation of those domains into the future as dynamic forces
- Some events in life can be anticipated, either as to probability or approximate timing or both.

The framework is constructed in a matrix format, with life stages on the horizontal axis, personal domains on the vertical axis and life events located in the cells formed by the two axes. The framework is believed to contain sufficient foreknowns within each life stage that an individual can, by adding personal knowledge and preferences, establish a foundation of personal information to which futures methods can be applied.

Below is an example of an abbreviated framework, with four life stages in the columns and the personal domains forming the rows. In addition to representing the stages of life, the horizontal axis represents both time and uncertainty, as uncertainty increases with time beyond the present. For simplicity, only four life stages and a limited number of events are shown in this table.



	<b>Independent</b>	<b>Vulnerable</b>	<b>Dependent</b>	<b>End of Life</b>
<b>Activities</b>	Retirement Travel Discretionary time	Reduced activities	Limited activities, mostly passive	Limited
<b>Finances</b>	Pension eligible Income reduced	Difficulty managing finances	Cannot manage finances Increased care costs	Arrange for final expenses
<b>Health</b>	Good health Chronic illness Major illness Sex difficulties Exercise	Failing IADLs Cognitive problems Frailty	Failing ADLs	Increased medical and care Hospice
<b>Housing</b>	Downsize Relocate	Home care or Move to assisted living	Home care or Move to nursing home	Home care or Nursing home or Hospice facility
<b>Social</b>	Grandchildren Illness or death of spouse Deaths of friends	Reduced social relationships	Reduced social interaction	Close family and friends Saying goodbyes
<b>Transportation</b>	Reduced driving	Transport by others	Transport by others	Transport by others

*Figure 4.30 A framework constructed from the research concepts and showing four life stages and selected events. Several of these events are drawn from the survey results shown in section 4.3.3.5.*

Using this table, expanded into a worksheet with large blank spaces, an individual can enter events that can be readily anticipated or planned. The personal domains suggest specific areas for planning within each stage: Retirement, an “empty nest,” moving to a retirement community and the arrival of great-grandchildren are all events that might occur during the Independent stage. The events shown in Figure 4.30 include selected high probability events for these stages.

The framework can also be utilized effectively to explore a single life stage. The following profiles show frameworks for each life stage. These profiles could be expanded into worksheets to include more personal events and to reflect the plans, goals and desires of the individual.

### Life stage – Infant

Personal domains-forces in life	Common or typical events in this stage	Positive events	Negative events	Wild card events
<b>Activities</b>	Motor skills develop Learning First words First steps			
<b>Finances</b>	Provided by parents		High expense illness Family poverty	
<b>Health</b>	Growth Development Childhood illnesses	Healthy	Malnutrition Inadequate care Serious injury	
<b>Housing</b>	Parent's home			
<b>Social</b>	Parents, siblings		Parents divorce Abuse	Death of parent
<b>Transportation</b>	Provided by parents			

*Figure 4.31 A profile of the Infant stage showing life domains and selected events from the research.*

### Life stage – Child

Personal domains-forces in life	Common or typical events in this stage	Positive events	Negative events	Wild card events
<b>Activities</b>	Start school Sports, games, school activities Pet(s)	Achievement Safe school	Failure	Extreme achievement
<b>Finances</b>			Family poverty High expense illness	
<b>Health</b>	Physical growth Cognitive development Contagious childhood diseases Minor injuries	Healthy	Poor nutrition Inadequate care Serious injury or illness	Disability
<b>Housing</b>	Parent's home	Safe home Safe neighbourhood	Unsafe neighbourhood	
<b>Social</b>	Social development Birth of sibling Schoolmates Both parents working	Good relationships and friendships “Nanny” or other supervision	Parents divorce Abuse Bullying Home alone Death of grandparent	Death of parent
<b>Transportation</b>	Provided by parents			

Figure 4.32 A profile of the Child stage showing life domains and selected events from the research.

### Life stage – Adolescent

<b>Personal domains-forces in life</b>	<b>Common or typical events in this stage</b>	<b>Positive events</b>	<b>Negative events</b>	<b>Wild card events</b>
<b>Activities</b>	Secondary school Complete public school Prepare for higher education Competitive sports Start trade school or university First job(s)	Success Achievements	Unsafe school Crime	Arrest
<b>Finances</b>	First earnings First money management		High expense illness Family poverty Auto expense	
<b>Health</b>	Puberty Growth spurts, strength Strong emotions First sexual encounter	Healthy	Alcohol, drugs, tobacco Serious accident Pregnancy Sexual disease Depression	Suicide Homicide victim Rehabilitation Birth of child
<b>Housing</b>	Parent's home First housing way from parent's home	Safe neighborhood	Unsafe neighborhood	
<b>Social</b>	Parents, siblings First romance First breakup Asserting independence, identity Risky behaviors Illness or death of grandparent	Respect for parents Trust in family	Parents divorce Abuse Bullying	Death of parent
<b>Transportation</b>	Independent use public transport Learn to drive Drivers license First car		Traffic ticket Auto accident	

*Figure 4.33 A profile of the Adolescent stage showing life domains and selected events from the research.*

Note that “Death of a parent” is listed as a wild card event for the first three stages of life, but not in succeeding stages. Wild card events are described as events with a low probability of occurring, but if they do occur, they have a strong impact on the individual. In later stages, the death of a parent becomes more probable and generally has less impact. Divorce may also be a high impact event for children and teenagers, but is not considered a low probability event.

### Life stage – Young Adult

Personal domains-forces in life	Common or typical events in this stage	Positive events	Negative events	Wild card events
<b>Activities</b>	Complete education Begin career	Achievements Advancement	Failure(s)	
<b>Finances</b>	Responsible for finances	Successful management of affairs	Financial problems	
<b>Health</b>	Physical maturity	Good health	Health problems Alcohol or drug problems Injury or accident	Homicide victim
<b>Housing</b>	Responsible for housing self and family. Select region, community, home	Good, happy home	Inadequate Bad area	Major relocation
<b>Social</b>	Independent: responsible for self and family or partner Marriage Parenthood, children		Male violence Divorce	Suicide
<b>Transportation</b>	Provide or arrange family transportation		Accident	

Figure 4.34 A profile of the Young Adult stage showing life domains and selected events from the research.

### Life stage – Adult

<b>Personal domains- forces in life</b>	<b>Common or typical events in this stage</b>	<b>Positive events</b>	<b>Negative events</b>	<b>Wild card events</b>
<b><i>Activities</i></b>	Career advancement Career pressures Sports with children	Recognition	Fired or jobless	Major advancement
<b><i>Finances</i></b>	Financial pressures	Increasing income	Inadequate income	
<b><i>Health</i></b>	Past peak health May neglect health Weight gain	Fitness	Health problems	
<b><i>Housing</i></b>	Larger home			
<b><i>Social</i></b>	Teenagers becoming independent Many time demands		Divorce Injury or illness of child	Death of child
<b><i>Transportation</i></b>	Transporting children		Auto accident	

*Figure 4.35 A profile of the Adult stage showing life domains and selected events from the research.*

### Life stage – Middle Age

<b>Personal domains-forces in life</b>	<b>Common or typical events in this stage</b>	<b>Positive events</b>	<b>Negative events</b>	<b>Wild card events</b>
<b>Activities</b>	Career peak	Expertise valued Scale back on work	Jobless	
<b>Finances</b>	Income peak Increased assets Retirement saving	Financially fit	Financial problems	Major income or asset change
<b>Health</b>	Menopause, end child bearing Vision changes (bifocals) Wrinkles, sags, gray Health problems and risks	Physically fit	Heart attack, stroke, cancer, diabetes, depression	
<b>Housing</b>	Nest is emptying	Second home	Lose home	
<b>Social</b>	Adult children-marriages Grandchildren born Divorce risk	Achievements Recognition	Parent illness or death  Adult children at home	Parenting grandchildren
<b>Transportation</b>			Auto accident	

*Figure 4.36 A profile of the Middle Age stage showing life domains and selected events from the research.*

In the midlife stage, at about age fifty, one's parents are generally in their seventies or older and may need help or care giving. At the same time, many adult children, recent college graduate, newly divorced and other children move back home to live with parents before going back out on their own. This phenomenon has created the term "sandwich generation" for people in midlife who are helping both their parents and their grown children. People in middle age may also find themselves raising grandchildren.

### Life stage – Independent Elder

Personal domains-forces in life	Common or typical events in this stage	Positive events	Negative events	Wild card events
<b>Activities</b>	Eligible for retirement Discretionary time Travel and leisure activities Stop working	Second career Volunteer Continuing education	Loss of role(s)	
<b>Finances</b>	Social security Government health insurance Fixed income Will, living will, instructions to physicians	Adequate income and assets	Inadequate savings Financial problems Reduced income (due to death of spouse)	
<b>Health</b>	Chronic conditions and multiple medications Skin loses elasticity, age spots, white hair, shorter, vision problems, aches and pains.	Physically fit Regular exercise	Health problems Heart attack, stroke, cancer, diabetes, etc Frailty	
<b>Housing</b>	Relocate Downsize	New home	Inadequate housing or neighborhood	
<b>Social</b>	Great-Grandchildren Change social circles Spouse illness	New friends Adult grandchildren Involvement with people and life	Caregiver to spouse Death of spouse Problems in child's family Abuse, scams	
<b>Transportation</b>	Reduced transport needs Declining driving skills		Accident Lose driving privileges Inadequate transportation	

Figure 4.37 A profile of the Independent Elder stage showing life domains and selected events from the research.



### Life stage – Vulnerable Elder

Personal domains- forces in life	Common or typical events in this stage	Positive events	Negative events	Wild card events
<b>Activities</b>	Reduced activities More passive activities			
<b>Finances</b>	Limited ability to manage finances	Adequate income and assets	Poverty	
<b>Health</b>	Difficulty with IADLs Physically or mentally vulnerable to becoming dependent Frailty Cognitive problems		Risk of falls Dementia Alzheimer's diagnosis	Suicide
<b>Housing</b>	Home, with spouse or help Assisted living			
<b>Social</b>	Reliant on family, friends or caregiver		Abuse or neglect Scams	
<b>Transportation</b>	Reliant on others for transport			

*Figure 4.38 A profile of the Vulnerable stage showing life domains and selected events from the research.*

### Life stage – Dependent Elder

<b>Personal domains- forces in life</b>	<b>Common or typical events in this stage</b>	<b>Positive events</b>	<b>Negative events</b>	<b>Wild card events</b>
<b>Activities</b>	Limited to passive activities.	Able to participate with others	Unable to participate	
<b>Finances</b>	Reduced ability to handle financial affairs		Unable to manage personal affairs Pressures from family members	
<b>Health</b>	Difficulty with several activities of daily living (ADLs) Require long term care Multiple medications Pressure sores Pneumonia		Excessive medication  Emergency room	Recovery to Independent stage  Suicide
<b>Housing</b>	At-home care Nursing home or assisted living	At home or home like atmosphere		
<b>Social</b>	Limited ability to meet with or communicate with people	Phone calls, emails letters and visits with family and friends	Difficult or limited access to phone or other means of communication Abuse or neglect	
<b>Transportation</b>	Provided by others. May be limited to special vehicles or ambulance	Travel	Unable to get out of residence easily.	

*Figure 4.39 A profile of the Dependent Elder stage showing life domains and selected events from the research.*

## Life stage – End of Life

Personal domains-forces in life	Common or typical events in this stage	Positive events	Negative events	Wild card events
<b>Activities</b>	Very limited activities Instructions and arrangements for death	Family events	Isolation	
<b>Finances</b>	Complete financial affairs and arrangements			
<b>Health</b>	Terminal diagnosis Second opinion Denial, anger, bargaining, depression, acceptance Palliative care, hospice care	Acceptance Receive care from family and professionals Avoid pain or discomfort	Discomfort or pain Emergency room	Return to Independent stage  Suicide or assisted suicide
<b>Housing</b>	Home Nursing home Hospice facility			
<b>Social</b>	Goodbyes to family and friends	Time with friends, family	Friends, family withdraw Family disputes Family refusal to let go	
<b>Transportation</b>	Dependent on others Limited needs			

Note that recovery to the Independent stage is listed as a wild card event in the dependent stage and the End of Life Stage. Some stroke victims in the dependent stage make unexpected recoveries, and some people diagnosed with terminal cancer also return to the Independent stage.

*Figure 4.40 A profile of the End of Life stage showing life domains and selected events from the research.*

The number of events shown in the above profiles is obviously limited by space and an attempt to remain relatively universal, although these profiles lean toward populations in developed countries. In addition, there are a number of events that are significant within different cultures, such as those celebrating the coming of age.

The frameworks provided by these three types of foreknowns; life stages, personal domains and major life events, when combined with personal plans, goals and desires, will provide the base from which to apply futures methods in order to explore personal futures.

## **4.6 Chapter Conclusion**

From the data collected through the methods described in Chapter 3.0, coding and comparison of incidents reduced the data to a large number of categories and properties, which were repeatedly compared and reduced again, eventually arriving at three core categories representing three types of foreknowns in life:

Life stages

Personal domains

Major life events

As the core categories emerged, so did their properties. Simultaneously, patterns in the data suggested concepts about the core categories and their relationships to each other. Those relationships led to the development of a framework, or life model, described above. What appeared remarkable was that as Glaser and Strauss (1967) predicted, the data produced categories that led to concepts that fit together in a workable framework that was not only relevant to life, but also relevant to the study of personal futures.

Because of the qualitative nature of the research and the methodology, there is an obvious absence of quantifiable or mathematically testable conclusions. Although the surveys produced quantifiable data, that data is still qualitative and trying to “prove” the results with formulas or equations is a part of what Glaser (1998) calls “forcing the data”, to which he devotes a full chapter. Weick (2001) and Ghoshal (2005) also warn about the risks of forcing data into formulas, Ghoshal stating that

Scholarship of common sense is the epistemology of disciplined imagination, as advocated by Karl Weick (1989), and not the epistemology of formalized falsification that was the doctrine of Karl Popper (1968) (p. 81).

From the perspective of Foresight and Futures Studies, it is also helpful to keep in mind that the underlying assumptions of the discipline emphasize that the future is open, not predetermined, thus more than one future is available. Setting futures research into fixed relationships or formulas would be contradictory to those underlying principles, and would tend to lead to predictions rather than alternatives.

In following the grounded theory methodology, the research has achieved what Glaser and Strauss (1967) promised, concepts that “fit”, that “work” and are “relevant” (p. i).

As these concepts emerged, the literature became increasingly helpful. The next chapter discusses the literature of a number of disciplines and how that literature relates to the concepts developed during this research.

# 5.0 Literature Review

## 5.1 Chapter Introduction

Grounded theory's very strong dicta are a) **do not do a literature review in the substantive area and related areas where the research is to be done**, and b) when the grounded theory is nearly completed during the sorting and writing up, then the literature search in the substantive area can be accomplished and woven into the theory as more data for constant comparison (Glaser, 1998 p.67).

Glaser's strong admonition to avoid reviewing the literature prior to conducting research has an important purpose; to help the researcher maintain an open mind during the research. It is important to note his qualifying "...**in the substantive area...**" (emphasis is Glaser's). As a result, this thesis is organized in a non-traditional format, reflecting the fact that the research was conducted using grounded theory. Chapter 2.0 reviewed the literature of Foresight and Futures Studies, which provides the foundation assumptions and methods upon which the research was based.

This chapter is a review of literature of a number of disciplines outside of Foresight and Futures Studies, where elaboration is sought for the concepts derived from the research. This literature is expected to generalize the concepts found in the research, but also to provide a theoretical basis for additional research.

Prior to submitting the application (R-1) for this research project, an exploration of literature relating to life stages was conducted to determine to what extent, if any, the human life cycle and the stages within that cycle would be helpful to understanding personal futures. Starting with Shakespeare's "seven ages of man" (Shakespeare 2000), the search led back to ancient Greece (Opsopous (2000) and a system of eight stages of Life. In India, the Hindu religion (Head 2000) described life in four stages or "ashramas" that are still in use today.

The eight-stage system was modified and developed into psychological theory by Erikson (1959) and is still prominent today in psychology. The eight-stage system, referred through much of this thesis as "Erikson's" has one stage for life after age fifty-five or sixty, termed old age.

A system of four life stages, similar to the Hindu system, is dominant in the field of gerontology. The four-stage system has two stages after about age fifty, termed "third age" and "fourth age." It appeared that neither of these systems fully dealt with the changes in later life that would be important to individuals trying to plan for their future lives. Consequently, this was the point where the research began, trying to understand the major changes in life after age sixty, and how those changes could help in.

This section includes literature relating to life stages that was studied before the research commenced in order to provide perspective, as well as the literature studied late in the research as recommended in grounded theory.

## 5.2 Exploring research concepts in the literature

*"This is how we place foreknown elements on the future scene. These foreknowns act as props and also as constraints, forming a frame within which our thought represents the future." (De Jouvenel, 1967 p.114)*

A critical element of this thesis is the identification of “foreknowns”, the trends and events in life that can be reasonably anticipated. In the search for foreknowns, the research developed several concepts. The principal concepts can be summarized as follows:

### Life stages

**Concept 1-**Life stages offer a valid basis for anticipating personal futures, and provide an opportunity for individuals to visualize a portion of their future. Any person can use the concept of life’s stages to view the next stage in life and each of the succeeding stages.

**Concept 2-** The stage of life referred to by Erickson (1986) as “Old age” is actually made up of four potential life stages, based largely on physical and mental health:

- Independent elder
- Vulnerable elder
- Dependent elder
- End-of-life

These stages are normally sequential, but stages may be skipped and in some cases a person may recover sufficient health to return to an earlier stage.

### Personal domains

**Concept -**Each individual lives life on multiple levels, managing several aspects of life each day. The data suggest six categories that exist in the lives of all humans, from birth to death. The six categories or domains are:

- Activities
- Finances
- Health and care
- Housing
- Social
- Transportation

. These domains or forces carry through each individual’s life. Personal finances, health, and social relationships for example, may be greatly affected by where a person is born or by the financial status of the parents. Each factor can be either a positive or negative influence on that person’s life and future.

### Life events-

**Concept 1-** Some life events correlate with age or life stage. Understanding that some events are more probable at certain times of life offers the individual an opportunity to anticipate some portions of the future.

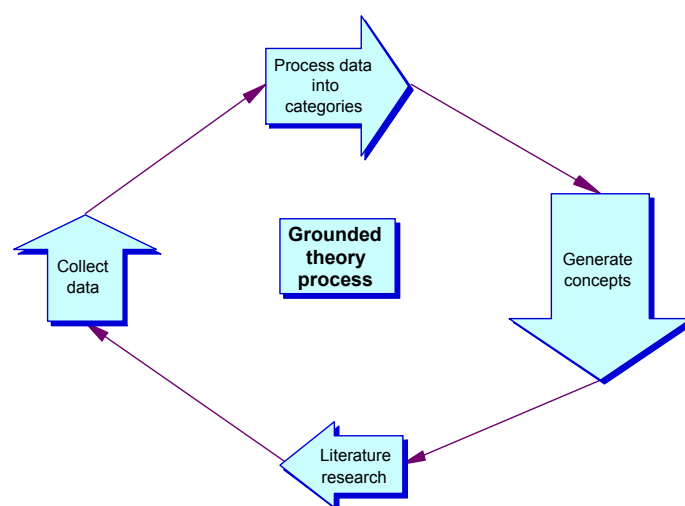
**Concept 2-**Some life events result from choices we make, and can also be anticipated. If we choose to marry, we may have children in a few years and grandchildren in another twenty to thirty years. If we choose to smoke

cigarettes, we may experience serious health problems a few decades in the future.

**Concept 3-**Some life events that impact individuals are the result of events in the life of a close relative or friend, and some of these events can be anticipated. If a parent dies, that is an event in the child's life. If a child marries or divorces, that is an event in a parent's life. Positive or negative events that occur in the lives of children and grandchildren are often events that impact the lives of parents and grandparents.

**Concept 4-** Some life events have multiple impacts. For example, the death of a parent may result in personal grief, bringing family members closer together, requiring personal responsibility to settle the parent's affairs, an inheritance or family disagreements over responsibilities and financial matters.

The principal purpose of this literature review is to enrich the concepts that emerged from the data by benefiting from the insights of other researchers and writers in related areas. The literature research looks for disagreement or support for the concepts, as well as different viewpoints. In addition, as Glaser (1998) suggests, some of the literature becomes additional data.



*Figure 5.1 The relationship of the literature review to the research process under Grounded Theory is illustrated as circular and iterative.*

As illustrated in Figure 5.1, the research began with the collection of data through several methods, continued with the processing of the data into core categories that led to the development of concepts, then the literature relating to those concepts was searched out for comparison of facts and concepts. Very often, the literature suggested new areas or questions to explore, a process that led to new data, which Glaser (1998) terms “theoretical sampling” (p.157), additional concepts and further referral to the literature.

### **5.3 Life stages: History and overview**

A cycle is one type of trend (Bishop, 1994) that is of interest to futurists, and the human life cycle is a trend that can provide clues to understanding one's personal future. A key premise of this research is that life trends and events can provide a framework for understanding and anticipating the future, but the early research found that existing literature and theory about life stages offered little information about life

and stages after middle age. As a consequence, the research began with a study of ageing and the feasibility of expanding information on stages within Erikson's final life stage, "Old Age" (1986).

Searching for historic information about late life stages and the human life cycle led outside the field of Foresight and Futures Studies to the disciplines of Psychology, Sociology, Demographics, Gerontology and Geriatric medicine, where it is apparent that "Every discipline has but a partial and limited view" of human aging (Baltes, 2001 p.25). Baltes goes on to say,

Old age and aging are inherently determined by a system of interacting physical, psychological, social and institutional phenomena, each of which is at the center of a different scientific discipline (biology, medicine, psychology, sociology, etc.).

Although Baltes refers specifically to old age, his statement appears to be applicable to all ages of life, and infers that a multi-disciplinary approach is important to understanding human life. Levinson (1996) states a similar call for a multi-disciplinary approach emphatically.

The study of the life course has presented almost insuperable problems to the human sciences. Each discipline has claimed as its own special domain one aspect of life, such as personality, social structure, culture or biological functioning, and has neglected or mineralized the others. The life course itself has been split into unconnected segments, such as childhood or old age, without recognizing the place of each segment in the life cycle as a whole (p.4).

Initial searches of literature relating to life stages disclosed two systems that date far back in history and are present in today's literature. From ancient Greece comes a system of eight stages attributed to Hippocrates (Opsopaus, 2000) that is dominant in psychology.. From the Hindu religion (Head, 2000), a system of four stages is the basis for descriptions of life stages in gerontology. The early Greeks also had a system of four life stages, similar to the Hindu system, which was drawn from the four seasons (Opsopaus, 2000). Both eight stage and four stage systems will be considered in this section.

The concept that the human life cycle proceeds through a series of stages is not new. Opsopaus (2000) presented an eight-stage version of life stages translated from Greek and attributed to Hippocrates. These life stages described old age as beginning at age 56 and the natural end of life at age 70. The eighth stage, beginning at age 70, is titled "The End" and is described as "an extremely old one" (p.1). Other historic references to life stages were found in the Talmud (Ashliman, 1999) and in Shakespeare's description of the "Seven Ages of Man" in *As you Like It* (Shakespeare 2000).

Modern researchers and writers in psychology and sociology (Havighurst, 1972), (Hurlock 1980) and (Erikson, Erikson & Kivnick 1986) also described detailed stages of life, but like the earlier writers, they tended to include all people over about 55 or 60 in one stage, usually called "Old Age" (p. 36), although Coor, Nabe & Coor (2003) term life after age 65 "Maturity" (p. 298). Levinson (1978) and (1996) identified a series of life transitions related to four eras of adulthood and Galinsky (1981) described six stages of parenthood, suggesting that parents change and grow through interaction with their children. Berger (2001), citing Levinson as an example, pointed out that white, middle class, North American and European sociologists and



psychologists tended to see age patterns in their own societies that did not match those of other social groups, particularly those of lower socioeconomic status.

A primary influence on this cultural clock-setting is socioeconomic status (SES). The lower a person's SES, the sooner he or she is expected to reach life's major milestones, from becoming independent to becoming "old." The influence of socioeconomic status is particularly apparent for women. Even in developed nations, women from low SES backgrounds are still pressured to marry by age 18 and to finish child bearing by age 30, while women from high SES backgrounds may not feel pressure to marry until age 30 or to finish child bearing until age 40. The social clock still ticks worldwide. Although reproductive techniques make motherhood at age 50 possible, women (but not men) are considered too old to have a baby at that age.

SES has an even more powerful influence on social clock-settings in some other countries. In some poor South American nations, for instance, marriage is legal at age 12 for females and 14 for males...(p.514).

Erik Erikson's eight stages are still prominent in psychology curricula (Krebs-Carter, 2000) and (Berger, 2001), but "the major emphasis in this schema is put on the childhood stages of life, with relatively scant attention to the later years" (Schwartz and Peterson 1979 p.17). Whereas Erikson's stages are specifically chronological, the last stage begins at age 55 and includes everyone older as being in old age. In fairness, two factors must be recognized in Erikson's work. As mentioned earlier, his concern was primarily with psychosocial development of children and young people. Second, the average life expectancy at birth in the United Kingdom and the United States at the time of Erikson's research was 66 years for men and 71 years for women (National Center for Health Statistics, 2002) and (Peters, 1998). For those who reached 65 in the United States, addition average life expectancy was 13 years for men and 16 years for women and only 12.7 million people in the United States were over age 65 (Social Security Administration 2002).

By 2000 the average life expectancy in the United Kingdom had risen to 75 for men and 80 for women, while the same figures had risen in the United States to 74 for men and 79 ½ for women (National Center for Health Statistics, 2002). Also in 2000, over 34.9 million people in the United States were over age 65 (Social Security Administration, 2002). In addition, people appear to be living healthier lives, as rates of disability are declining and people are remaining active into much later life than in earlier years (AARP 2003).

One inference that could be drawn from these statistics is that the single life stage that Erickson and others allotted for life after age fifty-five is inadequate for present times. In the years since Erikson's research, increasing numbers of people are living not only beyond 65, but also beyond 100 (Krach & Velkoff, 1999) suggesting the need for reevaluating the life stages in later life. The Eriksons apparently recognized this need, and after Erik Erikson's death, Joan Erikson described and published a ninth stage of life (Erickson 1997). Although this proposed ninth stage, labeled "gerotranscendence" (Verbraak, 2000), has received little recognition, its existence supports a reappraisal of later life stages. It is important to note, that in citing systems of life stages, and adapting them with modifications to personal futures, only the labels and age descriptions are adopted. Erikson's psychosocial development theory and description are important to psychology, but it is only the external description of stages that is important to personal futures.

At present, the average 65 year old will remain independent until age 75 (Clarfield, 2002) and many individuals will retain their independent living beyond age 100 (Swan, 1999). One consideration of life stages after age sixty is the perception of the people that are part of that age group. Gerontologists have suggested that people over sixty have different perceptions of “old” and “young.” Ward (1979) found that many people, even at advanced chronological ages, considered themselves “young” if they had such characteristics as:

- Still active and busy
- Good physical and/or mental health
- Rapport with young people
- Youthful appearance
- Mix with all ages
- Can still handle own affairs

Conversely, reasons that people might think of themselves as “old” included:

- Particular health problem
- Retirement
- Physical slowdown
- Health restrictions
- Changes in social contacts
- Illness or death of spouse (Ward, 1979 p.154)

Hayflick, (1994) contrasted chronological aging with biological aging, noting that individuals can be biologically older or younger than their chronological age, but he concluded that since humans have none of the biological “age markers” (p. 15) that are found in plants and some animals it is necessary, for now, to rely on chronological age. Ward (1979) has already stated that many people in their seventies consider themselves middle aged and as Hayflick added, “Chronological age is an unreliable measure of aging -- but a proven measure of the passage of time” (1994 p.149).

In contrast to the life stages of the early Greeks and the stages described by Erikson and other writers, a large number of people in the world favour an entirely different system of life stages, which divide life into four parts. The Hindu way of life, for example, is based on four stages, or ashramas:

- Student (brahmacharin)  
The student begins religious education and moral responsibility at about age eight, receiving regular instruction from a religious teacher.
- Householder (grihashta)  
Upon marriage, at about age 20, the householder begins to earn wealth, raise children and enjoy good and noble things while observing the law of righteousness and observing his obligations to family and community.
- Retiree (vanaprastha)  
In this stage, the individual gives up work and material possessions to study the scriptures, contemplate and meditate.
- Renunciation (sannyasin)  
In this final stage of life, the individual gives up his home to live in celibacy away from society while pursuing liberation until death. (Head, 2000).

In a 1930 essay, Swiss psychologist Carl Gustav Jung (1969) described life in four stages by comparing life to the sun's journey across the sky;

The first quarter, lying to the east, is childhood, that state in which we are a problem for others but are not yet conscious of any problems of our own. Conscious problems fill out the second and third quarters; while in the last, in extreme old age, we descend again into that condition where, regardless of our state of consciousness we once more become something of a problem for others. (p. 403).

Jung was probably aware of the Hindu beliefs, including the four life stages, as he had studied eastern religions (Dryer, 1991). His writings of the four stages of life may be a basis for numerous references in European gerontological literature to the third and fourth ages of life. These concepts of four stages of life are very broad, and provide little guidance as to what an individual might expect of later life.

Some writers in gerontology follow this four-stage concept and employ the terminology "Third Age" (Young old) and "Fourth Age" (Old old) (Baltes & Mayer 2001) to describe the later stages of life. Baltes and Mayer acknowledge some difficulties in defining the transition point between these two periods, describing a population-based definition and a person-based definition, then disclosing his preference for age 85 as the beginning of the Fourth Age. A report published by the NIACE, the *Fourth Age Learning Report* (2000) demonstrates a difference of approach by British geriatricians who declined to attach chronological age to these stages but instead described the Fourth Age as "a stage of life where there is some level of dependency on others for care" (p 4). Schwartz & Peterson (1979) further this latter position, pointing out that

All such formulations of life 'stages,' as already pointed out, lean heavily upon chronological age as their overall criterion. Some developmental psychologists are critical of the stages approach because of this (1979 p 19).

This passage suggests that there could be value to stages of life after age sixty that are not related to chronological age. A clue to the difficulty of relating stages to chronological age in later life may lie in Baltes' reference to the differences between a population-based definition and a person-based definition. Both use formulas that arrive at a chronological age at which the individual makes a transition from the Third Age to the Fourth Age. (Baltes & Smith 2002). One point of agreement appears in this discussion, and that is that the "young old," those in the Third Age, are not dependent on others for their care. They remain independent until the Fourth Age (Baltes & Mayer 2001).

### **Revisiting "Old Age"**

From the standpoint of adapting life stages to futures research, the stages described by the early Greeks and by Erikson offered stages that could be utilized effectively for personal futures. The data collected from the interviews, observations, document studies and surveys suggested that there were four distinct stages that occur after age sixty, and that Erikson's eighth stage, "Old Age" could be replaced with these four stages. Document research and the literature of geriatric medicine suggested boundaries for the four stages. At times there was a circular interplay as the research moved from the analysis of field data to literature research and back to the field for more data. As concepts emerged from the field data, the literature suggested new directions or raised new questions. In some cases, the literature was utilized to

provide data, as described by Glaser (1998). A specific example of using literature as data was the study of large numbers of article abstracts from the American Journal of Geriatric Medicine, which led to the names of the proposed life stages.

The research, based largely on interviews and observation and supported by the literature of geriatric medicine, identified in the following paragraphs, suggested that individuals typically pass through four potential life stages after age sixty that could be clearly defined and identified. These stages had the attributes of being sequential but were not related to chronological age. An individual might skip one or more stages, and it was possible to recover from an advanced stage and return to an earlier stage. The names suggested here for these four potential stages are practical and descriptive in nature and tend to follow terminology used in normal medical and geriatric practice.

*Independent Elder Stage* – the stage of life where one is able to manage all aspects of life and is physically and mentally capable of living independently.

*Vulnerable Elder Stage* – the stage of life where one needs some help and is vulnerable to becoming dependent, but may still live in the community and may appear independent.

*Dependent Elder Stage* – The stage of life where one is clearly dependent on others to function.

*End of Life Stage* – the stage of life after one has received a terminal diagnosis or advanced to the final stage of a terminal illness, usually with a remaining life expectancy of six months or less.

Geriatric literature does not describe these late life stages as such, but in providing standards for physicians, offers two sets of guidelines that are effective indicators for major changes in an individual's life and status. (Reuben et al. 2000) and (Fleming et al. 1995). Those guidelines are known as the Instrumental Activities of Daily Living (IADLs) and the Physical Activities of Daily Living (ADLs). Some authors (Reuben et al. 2000) and (Luchi, 2000) include a scale which can be scored based on whether the individual's performance for any given activity is performed independently, requires some assistance or is totally dependent on others. Inability to perform two ADLs is a typical requirement for a person to qualify for Long Term Care insurance benefits (Texas Department of Insurance, 2000) in the United States.

The life components that differentiate between the independent, vulnerable and dependent stages as discussed here are primarily physical and mental health, but in a practical sense, financial resources and family or social support can extend actual independence and lack of such support can increase dependence, or as the *Fourth Age Learning Report* (NIACE, 2000) states,

...there are some very dependent people who are living in their own or relative's home and some people with low levels of dependency living in institutions (p.11).

### **5.3.1 Independent Elder Stage**

The interviews and observation found the Independent stage requires little further description, because it appears to be a continuation of what most people consider normal, adult life. Many older people, including centenarians (Swan, 1999) remain in this stage until death, or very near death. Recent research indicates that the greatest fear of older people in the United States over age fifty is the loss of independence (AARP, 2003). Yet research found, and the literature confirmed that individuals

experience major changes and adjustments in their lives in this stage. In the developed countries, people prepare for retirement, then actually retire, with substantial changes in roles, commitments, income, responsibilities and discretionary time, among other changes. Independent elders are in the stage of life where they are typically grandparents or great-grandparents, starting or in retirement, experiencing the deaths of friends and relatives and have begun dealing with increasing health problems. Substantial adjustments are required, and preparation and planning for this stage can ease the transition.

### **5.3.2 Vulnerable Elder Stage**

Geriatric medicine suggests that many older people live in a state of vulnerability, a time when they may receive some help, often from spouses or family members, which permits them to remain in the community. These people are not fully independent, yet they are not really dependent. They may be seen as frail or “forgetful,” a euphemism for cognitive decline. Geriatricians and much of the medical profession identify the early symptoms of vulnerability to physical or mental decline utilizing the “Instrumental Activities of Daily Living” (IADLs) (Reuben et al. 2000 p.147), described below. Inability to perform any of these activities is an indication of vulnerability to becoming dependent, defining a boundary between the Independent Elder stage and the Vulnerable Elder stage

#### **The Instrumental Activities of Daily Living (IADLs)**

- Using the telephone (able to look up numbers, dial, receive and make calls without help)
- Travelling (able to drive one’s car or travel alone on buses, taxis)
- Shopping (able to take care of all food/clothes shopping with transportation provided)
- Preparing meals (able to plan and cook full meals)
- Housework (able to do heavy housework i.e., scrub floors)
- Taking medicines (able to prepare/take medications in the right dose at the right time)
- Managing money (able to manage buying needs, pay bills, keep track of income and expenses)

These terms and descriptions of independent ability will differ from those of other writers (i.e. Luchi, 2000) but were selected because they were prepared under the direction of the American Geriatrics Society. A scale accompanies this list that defines the individual’s ability to perform as “Independent; Assistance required; Dependent.” (Reuben et al. 2000 p.146).

An individual who is having difficulty with some of these activities may be at risk of losing the ability to live independently. Hayflick (1994) points out that as older people suffer from various conditions, their vulnerability to other conditions increases, and this is one of the values of the IADLs; to bring attention to the fact that one is becoming more vulnerable, and less independent. Some areas of vulnerability to becoming dependent are less easily defined. For example, people with multiple chronic conditions or multiple medications appear vulnerable if another medical

problem is added, but many people in these situations, usually with the support of family and friends, continue to live independent lives.

The research found that people entering this stage found the changes in their lives to be quite significant, and a substantial change from any previous stage. The geriatric literature appears to support this claim.

### **5.3.3 Dependent Elder stage**

The medical profession also provides a practical defining line between vulnerability and dependency in, the “Activities of Daily Living” or ADLs (Reuben et al. 2000 p.146). The inability to perform two or more ADLs is considered the standard for defining dependency not only by the medical profession, but also by insurance companies providing long term care insurance (Texas Department of Insurance, 2000), thus defining a clear boundary between the vulnerable stage and the dependent stage.

#### **The Activities of Daily Living (Reuben 2000 p.146):**

- Bathing (sponge, shower, tub)
- Dressing/Undressing (able to pick out clothes, dress/undress, manage fasteners)
- Personal Grooming (able to comb hair, shave without help)
- Toileting (able to get to, off and on toilet, arrange clothes, clean organs of excretion, use bedpan only at night)
- Continence (urination/defecation self-controlled)
- Transferring (able to get in/out of bed/chair without human assistance or mechanical aids)

These terms and descriptions of independent ability will differ from those of some other writers. This specific set of activities and descriptions was selected because it was prepared under the direction of the American Geriatrics Society. This list also includes scales of the ability to perform as “Independent; Assistance required; Dependent” (Reuben et al. p. 146).

Other descriptions of ADLs place more emphasis on mobility or on more detailed scales of performance while some scales are intended for more specific uses or requirements. The Klein-Bell scale (Bell & Klein 1982), for example, is designed for use in rehabilitation therapy and provides a more detailed scale in order to recognize patient progress in small increments.

The research found that the dependent elder stage often places sizeable burdens on the family of the dependent individual both in terms of emotional stress and financial expense. In the United States, Medicare (Healthcare Financing Administration, 2003), the government medical insurance program for people over retirement age, provides some financial assistance for care of the dependent elderly. More complete care is provided for individuals with little or no income or assets through Medicaid, a U.S. government funded program managed by the fifty individual states for people with limited assets and low incomes. Individuals with incomes or assets above the level of the Medicaid means test must provide for much of their own care, sometimes with the

help of family members and in some cases through the purchase of long term care insurance (General Electric Capital Assurance, 1999), (Texas Department of Insurance, 2000) and (AFL Insurance Co., 2001).

Long term care for spouses, parents or relatives can be of considerable concern to families in the U.S. because such care can be very expensive, capable of depleting retirement funds quickly. (AARP, 2003)

For many, if not most of the people who enter this stage of dependency, the life changes are profound. Some have to deal with great feelings of anger at their plight, which may even hinder their rehabilitation. In this stage, there is a loss of privacy, and a loss of control. The dependent person is now not only reliant on someone else to physically help them with activities of daily living, they also lose control of when assistance or activities occur during their day. For those who have planned and prepared for this stage, the transition may be less difficult than for others.

### **5.3.4 End of Life Stage**

The term “end-of-life” is found frequently in geriatric literature, but the interviews and observation found no clear definition as to when the end-of life begins. A reasonable assumption would be that this final stage of life begins with a terminal diagnosis, or in the case of slow moving diseases such as Parkinson’s or Alzheimer’s an indication from a physician that the disease is in its last stage. Document study and literature revealed that in the United States the national healthcare system for older people, Medicare, provides hospice benefits for up to six months (Centers for Medicare and Medicaid Services, 2003), requiring physicians and hospice facilities “to certify that a patient was terminally ill and had less than six months to live” (Weaver, 2000 p.18). This requirement provides a *de facto* limit to the end of life stage in the United States, but may be a reasonable measurement for this stage in most cases.

Preparation for the end of life is important, as many people are not able to make their own decisions due to crisis or incapacity at the time decisions are required. Many people prefer that their life end quietly and peacefully, not in an emergency room atmosphere. Many also prefer, if they are believed to be within six months of death, that they not be subjected to resuscitation or artificial maintenance of life. In the United States, instructions to physicians, sometimes in the form of a “living will” or “medical directive” allow an individual to make decisions about treatment and end of life care with some confidence they will be carried out. In addition, a “Medical Power of Attorney” designates and empowers someone to make decisions for an individual who is incapacitated or unable to make or communicate decisions about health care (Texas Medical Association Board of Counselors, 1999).

An important concern to individuals at the end of life is pain management. Although much pain and suffering can be relieved, some cannot, and unfortunately some pain that could be relieved is not. The medical profession in the United States is beginning to deal with several aspects of pain management (Hallenbeck, 1999) and hospice care is becoming known and accepted. A substantial majority of older people indicate that, given a choice, they would prefer to receive end of life care at home (AARP, 2003) and to die there among friends or family (Moyers, 2000). A certain amount of

planning is required for an individual to achieve this goal, including preparation of legal documents and communicating one's wishes to family and friends who might become involved, as a well-intentioned phone call to emergency services (911 in the United States) can completely upset plans for a quiet death.

Although there is a perception in some of the population that older people are preoccupied with death and dying, Baltes & Mayer (2001) suggests that this is a myth. As the Berlin Aging Study found:

In the psychiatric interviews, 8% of participants expressed death wishes and 1% were suicidal. These rates are comparable with younger age groups (p.481).

It also appears from the interviews that older people do not have a great fear of death, but they do have other fears, including:

...losing autonomy...decreasing ability to participate in activities that make life enjoyable...losing control of bodily functions...burden on family... inadequate pain control (Oregon Public Health Services, 2002 Table 3).

Many older people express the desire for availability of suicide as an option. Statistics in the U.S. show that older people in increasing numbers attempt to take their own lives, and their attempts are usually more successful than those of younger population, at least in part because older people utilize "highly lethal methods" (Center for Disease Control, 1996). As the older population increases, the numbers of suicides of older people are likely to continue to increase, even where suicide rates decline.

Physician assisted suicide has been legalized under strict controls in the state of Oregon in the United States (Task Force to Improve the Care of Terminally Ill Oregonians 1998). The experience there suggests that the availability of physician-assisted suicide has increased the medical profession's awareness and attention to treatment of pain. Oregon issued a total of 44 prescriptions for lethal doses of medication during 2001, but only 21 persons actually used their prescriptions to end their lives. 2001 was the fourth year that the law permitting physician-assisted suicide had been in effect in Oregon (Oregon Public Health Services 2002). The subjects of suicide and assisted suicide carry legal, ethical, moral and religious issues that limit the legal availability of this option. It is notable that the word "euthanasia" is sometimes used, improperly, in discussions of physician-assisted suicide. Euthanasia refers to death, for example a fatal injection, administered by someone other than the patient (Corr, Nabe & Corr 2003) and may be associated with medical executions. A physician assisting suicide only provides the lethal dose of medication that the patient may then take to end life. (Braddock & Tonelli 1998).

Elizabeth Kubler-Ross (1969) collected a number of case studies during her research on people in the End-of Life stage. Her observations about the treatment of people in this stage have led to better understandings of death and dying, including the description of five stages through which people typically pass when they learn of their impending death:

- Denial
- Anger
- Bargaining
- Depression
- Acceptance



In summary, the literature cited from multiple disciplines appears to support the proposition that there are four distinct potential stages of life after age sixty. The first stage could be considered an extension of middle age in that people in this stage of life may be feeling some of the natural effects of aging but are still in control of their lives and generally active. In the next stage, the individual is starting to lose some control either physically or mentally and is at risk of becoming dependent. In the third stage, the individual is dependent and must rely on others to help perform the physical activities of daily living and is probably no longer able to manage personal or family affairs. In the final stage of life, the nearness of death is known.

It can be reasonably argued that the four proposed stages described here are actually “states” rather than stages, and that a person can be dependent or die at any age, all of which is true. As discussed in earlier sections, there appears to be a common pattern of decline for people who live longer lives. Not everyone goes through each stage, but for those who do pass through any of these stages, there are substantial changes that take place as the individual moves from one stage to the next. For the purpose of preparing for one’s future, understanding these changes is considered important.

Interviews with older people and medical professionals found that most agreed with the concept of four potential stages after middle age, and the interviews were supported by the surveys and the focus groups.

The stages of life described by the ancient Greeks (Opsopous, 1995) and by Erikson (1986) left a gap between their descriptions and observations of later life in current times. Utilizing a combination of the Greek stages and Erikson’s (1986) stages of life, then substituting four new stages for Erikson’s eighth stage provided a workable set of ten life stages from birth to death that can be readily understood and visualized by individuals. These stages offer a set of foreknowns consistent with presently accepted theories of psychology and medical practice.

Following the pattern set by the ancient Greeks and updated by Erikson for the discipline of psychology, the following set of ten life stages is proposed for use in personal futures research:

Infant	Child	Ado- lescent	Young Adult	Adult	Mid- Age	Inde- pendent Elder	Vuln- erable Elder	Depend- ent Elder	End of Life
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*Figure 5.2 Ten proposed life stages for use in personal futures research.*

This combination of life stages appears to represent the important change-points in life, suggesting a sequence of images and time frames for the future. These stages are grounded in the interviews and observation and supported in the literature.

## 5.4 Personal domains: Forces within human life

Whereas life stages are part of the cyclic trend of life, the research suggested that there are a number of core life categories that behave as personal forces that are continuous throughout one’s life, moving from the past to the present and into the future. Recognizing these life categories, or domains, and their existence can provide individuals an important insight into their personal futures. As the research into life

stages unfolded, it became obvious that these domains are not only a valuable part of personal futures, but that the domains paralleled the human lifeline suggesting a matrix could be created composed of the stages of life and these categories, or domains. This matrix became the basis of a framework of foreknowns, a foundation for personal futures research.

The descriptive term “domains” applied to these forces was selected after using and discarding other terms including levels, areas and categories. The term categories was considered appropriate, but was easily confused with the same term as used in grounded theory. The literature review found varied uses of the term “domains” in studies of quality of life and personal well being, as discussed below

### **Quality of life**

One of the reasons for exploring and planning for personal futures is to achieve or maximize one’s quality of life. Research into understanding and defining quality of life and identifying relevant indicators has been conducted in several countries and organizations. This work is cross-disciplinary in nature, and appears to complement and support the concept of personal domains developed in this thesis. Calvert-Henderson (2000) describe their twelve quality of life indicators as “domains” and, although their work focuses on national trends in the United States, their domains overlap in many ways the personal futures domains introduced in this research. Land also describes “seven quality of life domains” (p. 10).

In the United Kingdom, Donovan and Halpern (2002) have done research for the Strategy Unit of the British government that surveyed individuals about their “Life satisfaction” in the same areas as several of the domains discussed in the previous chapter. The European Commission has funded research into quality of life areas, with particular emphasis on health, nutrition and environment (European Communities, 2000) as well as studies of the human mind (Nest, 2005). For many writers, well-being and quality-of-life were entirely health related, while Blanchflower and Oswald (2002) have conducted research that relate happiness and well-being.

The parallels between well-being or quality-of-life domains and personal futures are very strong, and valuable. The important distinction between the domains in quality-of-life studies and person futures is that the quality of life domains are made up of indicators of status, while the proposed personal futures domains are made up of forces and trends within each individual’s life that bring about change.

Some elements of life are ubiquitous. They are present in our lives from birth to death. These elements often affect one another and each impacts other important areas of our lives. Our parents provide or are responsible for many of these elements when we are infants and children. We assume full responsibility as we mature, but at the end of life others often must provide assistance in some or all of these areas. Tough (1982) discusses several “areas of change” (p.25), all of which fall into the following six categories. This is relevant here because each of the areas of change is within a personal domain and is helpful in identifying these areas of life.

### **5.4.1 Activities**

The interviews and observation noted that children learn to play, go to school and participate in games and sports. Adults work, raise children, participate in sports and enjoy other activities. The surveys found that older people have more freedom to travel and still participate in sports and hobbies. For many, religion is an important part of life, and in this context is considered an activity.

Although life activities as a category are viewed as a continuing force, the specific activities within the category vary greatly during the course of life. The majority of people follow a trajectory of school, followed by jobs or careers that take them from childhood to retirement (Elder, 1999). In some cases, a woman's career is inside the home and the man's is outside. Men and women who work outside the home often have difficulty adjusting to retirement, which is to an extent because there is a loss of role as well as a loss of the social circle associated with work. (Long, 1987). As people have discovered that their life expectancy has increased and retirement has changed from a period of years to decades, attitudes and expectancies of retirement have changed as well. A great number of retirees become involved in volunteer work, which may include caring for grandchildren, family members or friends (Long & Craton, 2001). In the U.S., large numbers of children are actually living and being raised in their grandparents' homes (AARP, 2003).

Harkness (1999) advocates continuing or changing careers beyond normal retirement ages, citing and attacking a number of myths about ageing as well as emphasizing the importance of keeping one's mind and body active. Harkness cites Michelangelo, Winston Churchill, Mark Twain and Katherine Graham as only a few of many "well known public figures who have produced long into old age..." (p.62). Donovan and Halpern state that "There is a positive relationship between job satisfaction and life satisfaction" and go on to note that "Being out of work is very damaging to your life satisfaction" (p. 3).

Schwartz & Peterson (1979) produced four descriptive categories of activities to define how people, and specifically elders, spend their free time (with examples p.165):

- Passive receptive (TV, radio read books, write letters)
- Passive creative (creative writing, stocks, do-it yourself, sewing, gardening)
- Social participative (play cards, visiting, sports, dancing)
- Social receptive (movies, musicals, spectator sports, travel, tours)

Long and Tongue (1999) suggest that older people in the United Kingdom are finding that leisure activities help them to reconnect socially after retirement and to benefit from physical activity. They further state that among men and women of all ages above sixty, the most popular physical activity is walking, but swimming, cycling, yoga and generally keeping fit are also popular activities.

### **5.4.2 Finances**

From the beginning of life to the end, the financial resources available to individuals affect how and where they live, their status within a community and the opportunities that are available.

The research noted that children generally rely on the financial resources of their parents and as they grow older, the ability to provide their own financial resources is an accepted indicator of maturity and independence. In many cultures, actual retirement becomes primarily a financial decision, and people without retirement incomes or families able to provide for them must continue to work or rely on government social programs. Others, who may have some income or assets may choose to work beyond retirement age to maintain a lifestyle, while others continue to work for other reasons, including maintaining a role or continuing social contacts. In some cultures, retirement may simply involve a change of roles or responsibilities within the family or community, but the individual's life after age sixty will be greatly affected by the financial resources of the family or the community. Unfortunately, in much of the world "the great enemy of independence and autonomy in old age is not changing family or community values, but poverty" (Randel & Ewing 1999 p. xiii).

Ando and Modigliani (1963) introduced a life cycle theory of saving and consumption which concluded that "Young people will save so that when they are old and either cannot or do not wish to work they will have money to spend" (Deaton 2005). In their model, individual consumption exceeds income during the first twenty to twenty-five years of age, then savings exceed consumption until the early sixties when consumption again exceeds income. Clark et al (2004) suggest that choices made during the life cycle strongly impact personal finances and retirement. Among those choices are schooling, saving versus borrowing, saving for retirement, timing of retirement and long term care insurance.

Social policies and programs of governments often impact the financial plans of individuals. For decades, the U.S. Social Security system permitted individuals to begin drawing full retirement benefits at age sixty-five, thereby setting the commonly accepted retirement age for the nation at sixty-five. For a variety of reasons, most related to longevity and funding, the retirement age for Social Security is being raised to age sixty-seven in the United States. This change will keep older people in the work force longer. In the UK, eligibility for full benefits begins at 60 for women and 65 for men, although the qualifying age for women will rise gradually to 65 between 2010 and 2020 (Social Security Administration, 2002).

When a person retires, their financial position is generally established, as retirement income is unlikely to increase other than for cost-of-living adjustments. Investment assets such as stocks and real estate may appreciate in value, but there is also a risk that those assets may depreciate (AARP, 2000). Many financial risks such as loss by fire, flood, auto accident, injury and other losses can be hedged with insurance. Long term care insurance is still relatively new in the U.S., but provides payment for long term care in an assisted living facility, nursing home or even in one's own home (Texas Department of Insurance, 2000). Since care for a person with Alzheimer's disease and other conditions can be very costly and continue for many years, insurance may be a valid consideration.

At some point approaching or near retirement age, each individual must make a number of financial decisions about the future based on the individual's perception of

financial condition, risks and benefits. The individual's decisions and financial condition, good or bad, will strongly influence important aspects of the future.

### **5.4.3 Health/Care**

Health and healthcare are an important component of life from birth through death. The research showed that babies are cared for and many children learn to wash, brush their teeth and comb their hair--learning personal hygiene that they will use the rest of their lives. Many children and adults have regular checkups and see doctors for injuries and illnesses. Diet and exercise are a normal part of life for many people at all ages. But not all children learn about personal hygiene or have the benefit of regular health care. Healthcare systems vary between countries and range widely in the quality of care available and the cost of care to the individual or family.

People start seeing physical changes in their bodies at mid-life and some begin dealing with chronic problems or serious conditions such as heart and vascular disorders, diabetes and cancer (Rowe & Kahn 1998). Others deal with aches and pains attributed to old age. In the late stages of life, many people require assistance and care, either at home or in a care facility. Eventually, all face death, either suddenly or over periods of time (Lynne, 2002).

How they will be cared for if they become ill or dependent is a topic of considerable concern among older people. Following are some options that are available.

#### **Home care**

For most of life, as children, adults and into later life, people are normally cared for during illnesses and recoveries in their homes, except for hospital stays for severe illnesses, surgery or accidents. In the later stages of life, many older people have been sent to nursing homes or "old folks homes" to be cared for, particularly for long term care.

As learned in the surveys, when asked, "the vast majority of older persons" indicate that they would prefer to receive treatment or care in their own homes if that is possible

(Himes, 2002 p.27), and many would prefer to die there if they were terminal. Medicare and long-term care insurance companies now pay benefits for patient care in the home (Texas Department of Insurance, 2000), including hospice care. The patient's spouse, family or friends often provide care at home with support from visiting nurses and other health care professionals. Care may also be provided in the home of a child or friend, but for people requiring professional care, "...in home services can be expensive, especially if they are needed for an extended period" (AARP, 2003 p. 102). As a result, economic and social costs along with the difficulty of finding reliable help may combine to become a barrier to home care. A recent development in the U.S. that may have an impact on costs is the entry of the hospitality industry (hotel owners) into first assisted living facilities, then more recently into home care (Keane, 2002).

#### **Adult Day Care**

Adult day care facilities provide care during the day for patients whose families work or need help with the tasks of care-giving. Some adult day care facilities provide

transportation; picking patients up in the morning and returning them home in the evening (NADSA, 2005).

### **Assisted Living**

Assisted Living facilities provide patients with live-in care, meals and assistance to manage the Activities of Daily Living including bathing, dressing, washing, eating and medications (ALFA, 2003).

“Residents of assisted living facilities are often quite healthy, but require assistance with personal and household cares” (Himes 2002 p.27). Most facilities offer prepared meals, housekeeping and transportation to local malls, stores and events. Some assisted living facilities specialize in caring for people with dementia or Alzheimer’s disease.

### **Nursing Home**

Nursing homes provide skilled nursing care for people who do not require hospital care, but cannot be cared for at home. Although many older people in the United States would prefer to avoid living in a nursing home, AARP research found that While a full 90 percent of Americans express some reluctance about moving into a nursing home, more than 7 out of 10 long term care dollars are spent on nursing home care (AARP, 2003).

Even though highly regulated, there is substantial variation in the quality of care between nursing homes in the U.S. Individuals who anticipate the possibility of entering a nursing home for long-term care would benefit from comparison research of available facilities while still healthy. Considerable information based on assessments by regulatory inspectors is now accessible to the public on the Internet (Kaplan, 2002), including the ability to compare nursing homes to inspection standards on the Medicare web site, [www.medicare.gov](http://www.medicare.gov).

### **Hospice care at home or in a care facility**

Field research and document study determined that hospice care is palliative care only, offering no curative treatment and is intended for terminal patients. In the U.S., the national medical program for older people, Medicare, requires a certification from the hospice organization that the patient is terminal and expected to die within six months before committing to pay benefits. Subsequently, the patient will receive pain medications and treatment only for comfort and conditions such as pressure sores (Centers for Medicare and Medicaid Services, 2003).

### **Continuing Care Retirement Communities**

Field research found that CCRCs provide progressive care as needed by residents. Most facilities offer independent living in homes or apartments as well as assisted living facilities and skilled nursing facilities all in the same community. If a resident in an independent living unit needs care, that person may be moved temporarily or permanently to either assisted living or skilled nursing as the individual’s situation demands (Helpguide, 2005).

### **Long Term Care Insurance**

Because the cost of long-term care is expensive and can continue for years, insurance is offered by several insurance companies in the United States to cover the cost of

care beyond the costs covered by Medicare, the U.S. government program of healthcare for older people (over 65). Document study found that this insurance is generally expensive, although costs have come down in recent years. A typical long-term care policy would provide benefits after a licensed medical doctor certifies that the patient is unable to perform two or more of the Activities of Daily Living. Typically, plans will pay medical care expenses up to an agreed percentage (80% to 100%) of an amount per day, for example \$100 per day. The higher the daily amount of liability to the insurance company, the higher the insured's premiums will be. Many insurance companies now make payments for care in the patient's home or in and adult day care centre (General Electric Capital Assurance, 1999), (Texas Department of Insurance, 2000) and (AFL Insurance Co., 2001).

#### **5.4.4 Housing**

The research found that children are normally provided a home by their parents until they reach sufficient maturity to become independent and establish their own homes and, in many cases, families. In nearly all cultures, the home is the centre of family life. In later life, some people reach a point where they can no longer manage a home and must be cared for, whether in their own home, a child's home, or a commercial care facility (See Health/Care above).

Observation suggests that housing, as a structure, is closely related to personal finances. But whether the roof is made of thatch, corrugated tin, cardboard, shingles or tile, housing is more related to the social domain as home, the place where the family comes together. Partly because of these two relationships, the term "housing" is very complex. As used in this thesis, housing considers regions, countries and communities. Also considered is whether the individual has choices in any of these criteria. People who are born into poor families, poor communities, poor or war torn countries have limited choices for their personal futures. People who are born into wealthier countries with free cultures have more opportunities including the opportunity to make choices.

In the developed countries, housing choices are largely based on family economics. Young adults, preparing to start families may rent an apartment or a house, then buy a home when financial resources permit. At retirement age, people are faced with a number of housing choices. Some of the possibilities include:

- Stay in the present home
- Move to a different home in the same area
- Move to a different area, often for warmer weather

If a decision is made to move from the present home, additional decisions arise as to the type of home that is desired:

- Single family home
- Multifamily home (apartment, condominium)
- Mobile home (Recreational vehicle or trailer)
- Urban neighbourhood
- Suburban neighbourhood
- Rural area
- Planned community
- Mobile home community or Recreational Vehicle park

Finally, a decision about a general area that is desirable may then lead to a search for a specific home.

At a later time in life, additional decisions may be required as the need arises for some assistance or care:

- Remain in the home-may require home modifications such as ramps, grab rails, wide doorways, modified fixtures and other modifications depending on the individuals condition.

- Congruent living – meals and transportation provided.

- Continuing Living (CCRC)- assistance and nursing available when needed.

- Care facility (Assisted living, nursing home).

Each of these decisions will be affected by one's financial situation, physical condition and marital status. Ageing in place may be easier for a couple than for an individual, and housing that includes care can be very expensive. For individuals with low incomes, housing and care may be provided at low cost by government agencies (AARP, 2003).

#### **5.4.5 Social – family and friends**

A child's social life begins with the family then expands to include other children of similar ages. The social circle expands with school, then work and community involvement. In older years, people find their social circles changing as they leave work, sometimes change communities and see their circles of friends reduced by illness and death (Baltes & Brim 1980). If the individual becomes ill or disabled, opportunities for social interaction are further reduced.

Although retirement is largely a financial decision, the research found that retirement includes substantial social implications for the individual. A person who retires from a job or career loses a major life role and part of his or her identity. In addition there is usually a sizeable loss in social contacts as the individual leaves the work place. If the retiree also relocates to a different community another major piece of the social circle is lost. Many people are able to build new social relationships quickly; others take more time and some people have difficulty establishing new relationships or friendships. Ward states that older people "report declining social interaction" (1979 p.344). Several theories that have been proposed in social gerontology relate to how older people may react to events that affect their social relationships include:

- Activity theory* (Cavan et al.1949) - Suggests that as older people lose social roles "in response to age-related deficits and losses" (Utz et al. 2002 p.523) they will engage in new activities to fill the void created by the loss of roles or activities in which they can no longer participate.

- Disengagement theory* (Cummings & Cummings 1961) – States that older people "will slowly disengage from social activities as they age" (Utz et al. 2002 p.523).

- Continuity theory* Atchley (1989) – Contends that, "prior levels of participation will determine current levels of social participation" suggests that people who have been active earlier in life will continue to be active (Utz, et al. 2002 p.523).



Neugarten, Havighurst and Tobin (1968) found that “neither the ‘activity’ nor the ‘disengagement’ theory seemed adequate” (p.173) for describing ageing. Utz, Carr, Nesse, and Wortman (2002) also expressed dissatisfaction with these two theories, stating, “...continuity theory prevails as the most applicable theory (among the three theories considered)...” (p. 531).

In addition to theories that relate specifically to aging, theories about life development in general offer insights into later life. Contemporary sociology focuses on two important perspectives. There is not agreement on whether either of these perspectives can be considered sufficiently developed to be considered theories (Elder, 1999) and (Benson, 2001).

*Life course perspective* professes that “human development and aging take place across the entire life span” (Elder, 1999 p.7) and that to fully understand any particular life stage, there must be an understanding of preceding and succeeding stages as well.

*Social constructionist perspective* places emphasis on the individual’s involvement in constructing both the life lived and the life yet ahead, or “reality is what we make it and how we perceive it, we have the ability to change our reality” (Chapin et al. 2002 p.6). The constructionist viewpoint “...rests on the assumption of individual rationality...” (Gergen, 2001 p.151) and on the Thomas theorem, which states, “if men define situations as real, they are real in their consequences” (Merton, 1995).

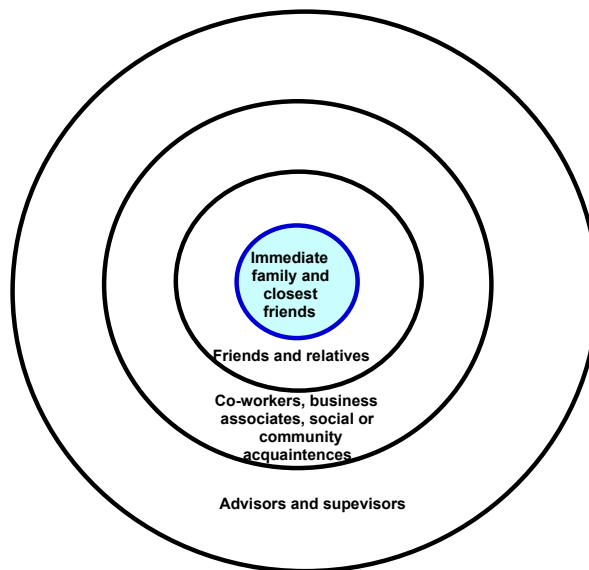
Neither of these two concepts excludes the other. Both can be correct, and the social construction concept can exist within the life course perspective. This view of constructing one’s life within the framework of the life course is consistent with the view of this research that individuals can plan and prepare for the future, all within a framework based on life stages.

A more recent approach to aging is the concept of “successful aging” discussed both in sociology (Chapin et al., 2002) and gerontology (Rowe & Kahn 1998) that combines concepts of the life course perspective with constructionism and biology. The Rowe and Kahn model for successful ageing is composed of three elements:

- “Avoiding disease”
- “Maintaining high cognitive and physical condition”
- “Engagement with life” (Rowe and Kahn 1998 p.39)

This model places health and social relationships at the heart of successful ageing.

Schwartz & Peterson (1979) illustrate social relationships as a series of concentric circles, with the small innermost circle composed of the individual, spouse and close family. The next ring includes one’s friends and neighbours with the third ring made up of frequent community contacts as well as one’s doctor, lawyer, minister and other people that influence the individual’s decisions (p.121).



*Figure 5.3 Social circles in life, adapted from Schwartz & Peterson (1979), Baltes & Brim (1980) and Falvey et al. (undated)*

Baltes & Brim (1980) use similar diagrams to illustrate changes in one's social circles at different points in life. Their model suggests that frailty or disability may restrict an individual's ability to participate in social activities or to interact with others outside the home. The research found that electronic communication has shown some promise for its ability to help people communicate and interact at unlimited distances as older people use technologies such as e-mail or cellular telephones and as other technologies appear on the scene.

The research suggested that, in practical terms, the ageing theories discussed above may be impacted by life stages after age sixty. People in the independent stage will probably seek new activities or continue previous patterns while they are healthy and active but are likely to reduce their social activities as they move into the vulnerable, dependent and end of life stages. The disengagement theory may have some validity in these later stages, when the individual requires more effort and time just to handle normal daily functions. Moreover, if an individual is moved to a care facility, significant barriers to social contact with family and friends are often created. Reduced cognitive ability often moves people into one of these stages, and may also affect social activity. There is also a possibility that friends may disengage from the individual at any of these stages and particularly during the end of life stage, as the friends become uncomfortable in the face of impending decline or death. In addition, an individual in these later stages may become less accessible if moved to a care facility, away from friends or with limited visiting hours. These multiple factors may combine to disengage the individual from accustomed social circles or relationships.

#### **5.4.6 Transportation**

The research found that to many people of the world, the primary form of transportation is walking. In the developed nations, children learn to walk, ride bicycles and eventually to use public transportation or drive cars. People often find that transportation is critical to their life, yet their access to grocery stores, department store, doctors' offices, churches or theatres may become restricted as they lose their physical mobility or their ability to drive or use public transportation (Schwartz &

Peterson 1979). This explains why transportation is considered a force in life: because transportation is the key to access. A report by Britain's Social Exclusion Unit deals with some of the problems related to lack of adequate transportation, stating:

“Problems with transport and the location of services contribute to social exclusion by preventing people from participating in work or learning or accessing healthcare, food shopping and other local activities.(2003 p.9).

These problems are often related to “...low incomes, or because bus routes do not run to the right places. Age and disability can also stop people from driving and using public transport” (p. 1). The decision to stop driving constitutes an important event for adults, as this restriction on their mobility is also a restriction on their ability to function independently (AARP, 2003). The difficulty of this transition can be eased substantially by prior planning that includes substitute transportation and at least some control of scheduling by the individual.

### **Summary**

These six personal domains (activities, finances, health, housing, social and transportation) are categories that emerged from the interviews and observations. These domains have been further refined and supported by the literature as described above, resulting in a personal futures dimension that was not anticipated at the beginning of the research. As a result, the identification and development of personal domains has introduced primary driving forces and trends in personal futures research.

### **5.5 Life events**

If, as Dator (1996) suggests, the future is the result of the interaction between events, trends, images and action, then an understanding of events that are most likely to occur during one's life should be helpful in anticipating and preparing for the future. The interviews and observation made apparent that events are an important part of life, and that some events may change the direction of one's life. The surveys brought out specific life events, both positive and negative that occur later in life raising questions as to the extent that events could be anticipated, whether for their probability of occurrence, their timing or their impact upon the individual.

Several life events have been mentioned in the discussion just above about personal domains, as life stages, life categories and life events are all intertwined. Life events are numerous, and would include cohort events (Strauss & Howe 1991) that impact a generation, important events that affect or change an individual's life and “turning point” or transformational events, which change the direction of one's life.

The results of the principal survey revealed a number of both positive and negative life events that respondents listed as being important in their lives. Literature on life events formed to important categories: 1)- the relationship of life events to happiness, well-being or quality-of-life, and 2)- the impacts of life events on individuals.

In the first category, relating life events to well-being or quality-of-life, Blanchflower and Oswald (2004) found strong links between a limited number of personal and economic events and their subsequent impacts on personal happiness or well-being.

In the second category, the Holmes-Rahe “Social Readjustment Rating Scale” (Holmes & Rahe 1967) is an internationally recognized list of life events that lists 43 events. The list was upgraded to 86 events in 1997, largely by dividing single events into several components of the same event. For example, “Death of a family member” became four categories, including death of a “child, brother or sister, parent” (Miller & Rahe 1997).

The list ranks events based on the emotional or stress impact of the event on an individual, considering both the level of stress and the length of time required to recover. At the highest levels of stress are such events as death of a spouse or divorce while the lowest end of the scale of events includes vacation, Christmas or a traffic ticket. Ward notes that in the Holmes-Rahe list,

...it is striking that many of the most disruptive events accompany aging- death of spouse, family member, or close friend, personal illness, retirement, sex difficulties, change in financial state and so on.” (1979 p. 124).

Yet Miller and Rahe (1997) observed a “...lessening of importance of life change events as a person passes 60 years of age” (p.289).

One possible reason for this apparent disparity could relate to sufficient prior experience with some events to reduce their emotional impact. On the other hand, the Holmes-Rahe (1967) and Miller-Rahe (1997) scales do not include several events that are specific or more common to older people. For example, loss of vision, loss of hearing, loss of mobility or providing care for a seriously ill or dying spouse, all of which may be more common among older people, and include considerable stress.

Miller and Rahe (1997) refer to the events in these scales as “life change events” and to the values in the scale as “life change values” (p.279). This terminology is important in that it brings attention to the fact that most major events in life are related to change. Just as managing change is important to organizations, understanding and preparing for change can reduce the negative impacts of personal change.

Another approach to analyzing life events and their impacts is that taken by Clark and Oswald, who “...show how regression analysis of subjective well-being scores can be used to construct a monetary valuation of life events” (p.1140). By monetizing life events, they are able to offer quantitative answers to questions about life events such as “...which is worse: divorce or unemployment? Which is better: a large pay rise or getting married?” (p.1139). Also studying well-being, Helliwell explored events and values in forty-nine countries. One of the values of this research is the exploration of cultural or national influences on different events. Although much of the well-being research relates to the state of an individual after experiencing an event (married, divorced, widowed, unemployed, etc.), well-being is significant to personal futures, and these studies add a valuable dimension.

Change in one’s personal life will usually fall into one of three categories:

- Intentional change, such as marriage

- Unintentional change, as in a heart attack or auto accident
- Cyclical change, as in movement from one stage of life to another.

Intentional change can also include efforts to improve one's life or health. Stopping smoking, changing diet, starting an exercise program, changing careers, and living in a recreational vehicle are also examples of intentional life changes. In a study of Canadian adults interviewed about recent changes in their life, 67% of the changes were described as intentional and 33% were unintentional. (Tough, 1982) The participants "rated the intentional portion of their change as far more beneficial than the unintentional portion" (p.50). Tough also found that 75 percent of intentional personal changes fell into four categories:

- Job or career
- Human relationships and self-perception
- Enjoyable activities
- Residence location

Unfortunately, many intended changes are difficult to achieve or maintain, such as diets or exercise programs, as they require overcoming complacency, having a vision of success and some short-term successes (Kotter, 1996) in order to adjust one's lifestyle sufficiently to accommodate the change of habit or activity. An example of intentional change that is common to older people is retirement. Although some people are forced into retirement by mandatory age situations, unemployment or ill health (Phillipson, 1998), retirement is an important and intentional change in the lives of most retirees. Like most of life's major events, retirement requires a transition, which includes "an ending", "a period of confusion," and "a new beginning" (Bridges, 1980 p.9).

Geriatric medicine also deals in life events, specifically health related events. Chronic diseases or conditions may be managed with medication or changes in lifestyle but are seldom cured. Some of the more common are:

- Arthritis
- Hypertension
- Heart disease
- Diabetes
- Respiratory diseases
- Stroke
- Cancer
- Falls

Although four of these diseases, heart disease, cancer, stroke and chronic obstructive pulmonary disease were the leading causes of death in the U.S in 2000 (National Center for Health Statistics, 2003), they are diseases that can affect an individual's life over many years. Other chronic conditions are simply painful or debilitating (Himes, 2002 p.14). Falls are a normal part of infancy and childhood, but become more serious as one grows older, sometimes resulting in broken bones and other injuries. Although seldom the direct cause of death, "a fall is a major event in the life of an older person" (Morley, 2002 p. 492) and is often the event that begins a downward health spiral that can lead to death.

In addition to the life events that impact one individual at a time, some events affect populations and generations. People who are presently over age seventy-five have lived through a world depression, World War II, the Cold War, Korean War, the war in Vietnam and several other common worldwide experiences that put a specific imprint on each person's life. "Baby-Boomers", the generation born immediately after World War II have, by their sheer numbers changed societies as they have grown and will doubtless have a substantial impact and influence on healthcare and other institutions related to aging as they grow older. Furthermore, each nation has its own separate history of events, some of which may affect its citizens today. For example, children who were evacuated from London during WWII shared a set of experiences specific to their generation and location. Each generation has a different experience base from other generations. Those cohort experiences influence the way each generation views its surrounding world and colour that generation's responses to every change (Foot & Stoffman 1998) and (Strauss & Howe 1991).

### **Change**

Change is what makes the future different from the present, and change is often associated with an event. Events that have occurred in the past may influence one's future, and decisions or actions in the present may result in intentional or unintentional events in the future. Finally, some events appear to correlate with age or life stage, and can be anticipated.

In addition to the types of change discussed above, change occurs at different speeds and in different manners, often following recognizable patterns including linear change, S-curves, accelerating change, evolutionary change, step-jump change, chaotic change and other models (Groff, 2000). It is helpful to keep in mind that change is the motivating element in studying the future. Without the expectation of change, there would be little point to thinking about the future. This concept of a future without change provided the plot for the movie *Groundhog Day* (Rubin & Ramis 1993) in which the lead character woke up each morning to repeat the same day, with no expectation or anticipation of change. Yet, change is normal in real life. Heraclitus, a sixth century B.C. philosopher noted that one cannot step into the same river twice, because even though the river may appear the same, the water is always changing (Graham, 2002).

## **5.6 Chapter Conclusion**

The literature search provided historic background, comparable research and theories from several disciplines that added dimensions and new directions to the research. The interviews and observation research had developed three core concepts; life stages, personal domains and life events, which were then explored in the literature, returned to the field for further clarification or development, then returned to the literature. This circular process developed the three core concepts to the level where conclusions could be drawn about the values and contributions of each.

The next, and final, chapter will draw conclusions from the research, identify original contributions and suggest further areas for research in the field of personal futures.

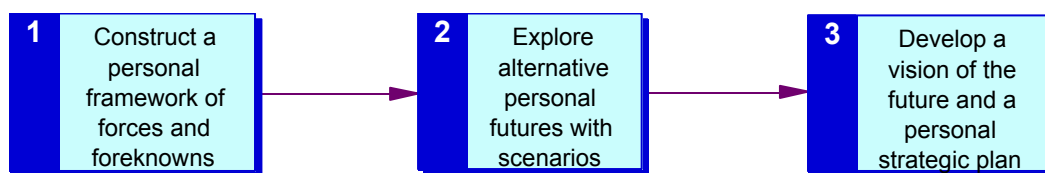
# 6.0 Conclusions and Implications

## 6.1 Introduction

The research originated from a concern with the fact that although methods were available for studying the future, and there was an apparent interest and desire on the part of individuals to understand the future, there was very little apparent research or activity in the area of personal futures. This situation was attributed to the complexity of the futuring process, and an attempt was made to determine the components of that complexity. Further investigation suggested that the complexity of the futuring process lay primarily in the personal research required to establish a baseline of information to which futures methods could be applied. The research then explored approaches to simplifying this process and to identifying foreknowns that would help simplify the futuring process.

In this chapter, conclusions will be drawn about the synthesis of the results of the research into a set of learning tools that can be used effectively by individuals to explore and plan their personal futures. Following each conclusion is a brief synopsis of what was found in the literature and what was learned during the research for each research question. In addition to the bibliographic references, references within this paper are noted with chapter and section numbers in parentheses.

As the research proceeded, it appeared that the context in which the foreknowns would be used should be considered. Since the intent of the research was to reduce complexity in order to develop a practical approach to developing personal futures, the foreknowns resulting from the research would determine the individual's base data, from which futures methods would then be used to provide information about the future and develop plans to use that information. A suggested three-step model for personal futures research is illustrated as follows:



*Figure 6.1 A proposed model for development of personal futures*

Although this research was concerned primarily with the first stage of the model, understanding that the data in the first stage will be used to develop personal scenarios in the second stage and personal strategic planning in the third stage provided context for organizing the data from the research into a useful framework.

## The research process

The process of the research as it is developed in each chapter is illustrated in the table below. This table does not necessarily reflect the sequence in which research was actually conducted, as much of the literature research followed interviews, observation and field research.

<b>Research Question</b>	<b>Chapter 2</b>	<b>Chapter 3</b>	<b>Chapter 4</b>	<b>Chapter 5</b>	<b>Chapter 6</b>
<b>Personal futures</b>	Futures literature provided assumptions, concepts and methods. Developed three step approach to personal futures				Applied stages, domains, events, framework to personal futures research
<b>Life Stages theory</b>		Found serious limitations to life stages theory after age 60	Reconstructed life stages concept to fill gap in theory after age sixty	Researched historical life stages and writers including Erikson's theory.	Applied modified life stages to personal futures
<b>Additional stages after age 60 to replace "Old age"</b>		Interviews and observation suggest concept of four additional stages. Survey and focus groups asked people over 60 if four life stages appropriate	Data from interviews, observation, surveys and focus groups defined four potential life stages. Concepts of life stages formed,	Literature: supported four additional stages and suggested boundaries	Life stages became an essential element of personal framework



<b>Personal domains</b>		Interviews and observation suggested six levels or categories in life.	Categories provide data from which trend lines can be drawn  Concepts of Personal Domains developed.	Literature suggested trajectories and offered limited support for six categories that are present throughout life	Personal domains are recognized as driving forces and an essential element of the personal framework
<b>Life events</b>		Survey requested “Best” and “Worst” events since age 60	Compared “Best” and “Worst” life events after age 60 with literature.	Life course and psychology literature suggested events, types and impacts	Life events are determined to be a critical element of personal framework
<b>Framework</b>			Combined concepts into framework for personal futures research. Created life stage profiles	Life course and psychology provided background for profiles	Framework contributes new approach to personal futures research

*Figure 6.2 Table illustrating the research process.*

Illustrated in table format, the research process appears in simplified form and summarizes the steps and progress of the research through each chapter.

### **Sequence of learning**

The sequence of learning for this thesis began in the Masters program in Studies of the Future at the University of Houston, Clear Lake. Here I studied futures literature and learned about futures methods. In the final semester of futures studies, I became interested in personal futures, and explored the human life cycle and life stages as a possible avenue to understanding personal futures.

After graduation from the University of Houston, I enrolled at Leeds Metropolitan University and attended the Post Graduate Course in Research Methodology. During the course of completing the PGCRM, I prepared an application (R-1) to begin thesis research for a PhD. The R-1 was based on my interest in personal futures including the fact that I felt that current descriptions of life stages did not deal adequately with changes in life after age fifty-five to sixty. These changes appeared important to personal futures.

The thesis research began with interviews, observations, document study and an initial survey. The interviews, observations and document study provided sufficient data from which to develop questions about ageing and about life stages. From a learning standpoint, I was learning how to do effective interviews; how to observe and learn from people while observing or participating in activities with them; how to read abstracts and document, extracting words as data; and learning how to conduct mail surveys.

During this time, confidence developed in the value of life stages as a tool to develop images of personal futures. At the same time, the data from the various research methods was suggesting that people “live on multiple levels,” one of my first notes or memos about personal domains. As the data accumulated and the categories developed, six of these levels emerged, appearing to be applicable to most people and acting as forces in their lives. This was a very important development in the research. The term “levels” did not seem to express the importance of the forces, nor did the term “areas.” The description “categories” conflicted with the broad use of that term in grounded theory methodology, but “personal domains” appeared to be appropriate, as these were the internal forces that appeared to bring about change in the lives of many people. The emergence of these forces gave me considerable additional confidence in the grounded theory methodology.

While studying life stages and personal domains, the importance of life events began to emerge. Not only were some events important, some appeared to change the direction of an individual’s life, and some seemed to be related to different times in life. The final survey disclosed a number of positive and negative events that were important to older people, providing data that moved the research more strongly into this area. With enough data to saturate several categories of events, creating a core category, a search of literature about life changing event opened up several new areas for exploration, a process Glaser terms “theoretical sampling” (1998 p.157).

The concepts derived from the research data led to the conclusions and contributions to Foresight and Futures Studies that are discussed in the balance of this chapter.

### **Implications, limitations and further research**

After drawing conclusions about the research, this chapter explores the implications of those conclusions for the theories and methods underlying the field of Foresight and Futures Studies as well as the implications for policy and practice within the field. The limitations to the application of the conclusions drawn from the research will be examined and relevant areas for future research recommended. The chapter concludes with a summary of the findings and conclusions.

## **6.2 Contributions from each research issue**

For the concepts of personal futures to become understood, accepted and practiced within general populations, individuals will require a combination of information and tools that will enable them to explore their own futures. It was an assumption of this research that in order for such information and tools to be useful to individuals, a

certain amount of simplification of the futuring process must occur, and an important step in that direction appeared to be the identification of foreknown events and changes that commonly occur in life.

### **Contributions to Foresight and Futures Studies**

This research has identified normal or typical stages, events and forces in the course of human life that offer a pattern or structure for exploring individual futures. By providing understandable structure, this research has the potential to benefit anyone interested in exploring personal futures or anyone proposing to teach personal futures.

- The primary contribution of this research to the field of Foresight and Futures Studies is the development of a personal futures framework of foreknowns, a matrix composed of life stages, personal domains and major life events. Each of the elements within this framework; the enhanced stages of life, the six personal domains and the major life events, represents an advance in futures concepts.
- The four life stages after age sixty, essential to the framework, were not found in any other discipline, although the terminology employed to describe the stages is common within the field of geriatric medicine. These designations and stages may or may not have value in other disciplines, but they serve an important purpose in the advancement of personal futures and are generally understood by the populations they are expected to affect.
- The six selected personal domains have not previously been recognized in futures literature either separately or as a group of categories that carry through each individual life.
- Lists of major life events are not new knowledge by themselves, but in the context of the personal futures framework represent a contribution to personal futures methods.
- The personal futures framework is a unique approach to the study of personal futures that guides beginners or professionals with essential foreknowns for developing personal futures.

### **Summary of original contributions**

Frequently cited as a standard for identifying ‘original contribution to knowledge’

Phillips and Pugh (2000) list fifteen definitions of originality that guided the interpretation of contributions included in this research. Following are examples of the application of originality to the four areas discussed in this section

- The personal futures framework successfully makes a “synthesis that has not been made before” (p.63)

- The research and conclusions about life stages including the four life stages proposed to replace Erikson's eighth stage, "Old Age" as they apply to personal futures continues the "previously original piece of work" (p.63) by Erikson, Erikson and Kivnick (1986) in psychology and demonstrates "cross-disciplinary" (Phillips & Pugh 2000 p.64) research.
- The research and conclusions about personal domains looks "at areas that people in the discipline [Foresight and Futures Studies] haven't looked at before" (p.64).
- The personal futures framework presents a "new piece of information in writing for the first time" (p.63).

Most importantly, this research offers a new technique for approaching personal futures that offers the possibility that "...people in their everyday lives can use the futures perspective to discover and create choices for themselves" (Bell, 1997 p. xxiii).

### **6.3 The Research Conclusions**

The research explored and developed the components of the framework; life stages, personal domains and major life events. The resulting personal futures framework is discussed below in terms of the research, the literature, application to futures research and contribution to knowledge.

#### **6.3.1 Life stages**

The first conclusion drawn from this research is that the human life cycle and the stages within that cycle constitute a series of time frames or paradigms in the life of each person that provide a valid basis for viewing personal futures. Each time frame has attributes that distinguish it from prior or succeeding stages, and these stages can be anticipated, individually or as a series, to the end of life.

The research also concluded that four potential stages of life exist after age sixty and are important to understanding personal futures. Each stage is distinctly different from the preceding or following stages and represents a major change in the life of the individual. Unlike the earlier stages of life, these stages are substantially related to physical and mental health. The last three stages represent decline, ending in death. When these four life stages are substituted for Erikson's eighth life stage, "Old Age" (1980), the description of life is more realistic. These conclusions are drawn from the research, first in interviews (4.3.1) and observations (4.3.2), supported in document studies (4.3.4) and field research (4.3.5) and supported in the survey research (4.3.3) and the focus group research (4.3.6).

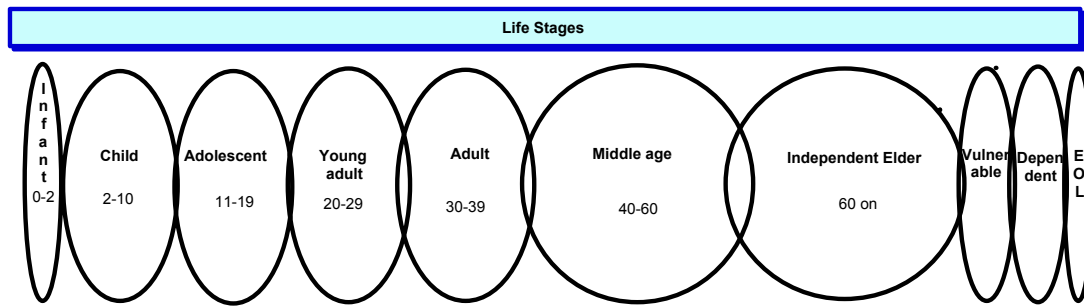
The many writers dealing with life stages based on the ancient Greek system (Opsopaus, 1995) suggested a number of variations to the stages (See section 2.3.1). For example, Hurlock's (1980) first stage begins at conception, while Erikson, Erikson and Kivnick (1986) begin at birth. At the other end of life, Erikson begins

“Old Age” at age fifty-five while Hurlock begins the same stage at age sixty. The ancient Greeks (Opsopaus, 1995) considered a person between fifty-six and seventy an “Old One” and termed life after seventy as “The End.”

The interviews (4.3.1) and observation (4.3.2) suggested that the stage identified by Erikson (1986) as “old age” was actually made up of four distinct stages. The systematic survey of Senior’s Choice members (4.3.3) indicated that 83.3% of respondents found this concept to be “OK” or “Represent life after 60 accurately.” The first focus group (4.3.6) was also supportive of this concept of four potential stages of life after age sixty. As a consequence, four new stages were proposed to replace the stage that Erikson described as “Old Age” and the research found support not only from a survey of persons over age sixty (4.3.3.2) but also from Joan Erikson. After Erik Erikson’s death, Joan Erikson (1997) proposed a ninth stage of life covering the late eighties and nineties. Descriptions of life stages date far back into history, but the length of life has changed substantially over the centuries, distorting or outdating previous descriptive systems, particularly for life after age sixty. The four proposed stages are not related to chronological age, so should not be affected by changes in longevity or life expectancy in the future.:

- Independent elder  
The individual is able to manage all aspects of life and is physically and mentally capable of living independently.
- Vulnerable elder  
The individual needs some help, but may still live in the community and appear independent, and is having difficulty with some of the Instrumental Activities of Daily Living (Rueben et al. 2000) and is vulnerable to becoming dependent.
- Dependent elder  
One is clearly dependent on others to function and is unable to perform at least two of the Activities of Daily Living (Rueben et al. 2000)
- End-of-life  
The time after an individual has received a terminal diagnosis or enters the terminal stage of a disease, usually with a remaining life expectancy of less than six months (Centers for Medicare and Medicaid Services, 2003)

From the literature and the research, a system of life stages that incorporated the thinking of these authors with the need for easily understood stages that describe the major change points in life emerged, as shown below.



*Figure 6.3 An illustration of a proposed system of life stages showing sequence and approximate or relative duration of the stages. This system is intended to provide guidance to help individuals visualize and anticipate some of the stages and changes that can be expected in their lives.*

Any system of life stages is open to challenge, and this system is no exception. For example, the stages Young Adult and Adult could be combined into a single stage, as there is no obvious major change between these two stages other than the end of physical growth and the beginning of physical decline (Hayflick, 1994). This diagram follows Erikson (Erikson, Erikson and Kivnick 1986) in these two stages, in part because of the number of life altering decisions commonly made in the young adult stage.

Psychologist Carl Jung (1969) favoured a four-stage depiction of life, comparing the stages to the rise and descent of the sun. Gerontologists Bernice Neugarten (1968) and Paul Baltes (2001) also describe life in four ages, but as Baltes says “Every discipline has but a partial and limited view” (p. 25) of human ageing.. For the purposes of personal futures research, the four-stage system is vague and provides little detail or guidance to anyone trying to understand or anticipate life. In addition, there is little definition to differentiate between the stages. Further, as people live longer in the third or fourth ages, this must either affect the symmetrical appearance of the four stages or lengthen each stage to maintain proportion. For these reasons, the four-stage system was determined to be impractical for personal futures research.

After considering many possibilities, the proposed set of stages appears to reflect real life, fits within De Jouvenel’s (1967) concept of foreknowns and provides one way to illustrate and describe the human life cycle.

## **Application**

From a practical standpoint, systems of stages derived from the Greek system are both appropriate and helpful to the study of personal futures, simply because they relate to the normal or observable sequence of changes in humans and provide divisions in the human life cycle. Practitioners of Foresight and Futures Studies search for change events in the future, and life stage systems are based on changes in human life. The proposed

life stages provide a foundation for understanding and anticipating personal futures based largely on a series of biological or physical changes that occur in the human life cycle.

From the standpoint of visualizing or planning personal futures, life stages illustrate the important changes and discontinuities in life. During the first half of life, the stage changes are largely biological or developmental; the middle stages reflect intellectual and emotional growth while the later stages of life are related to physical or mental decline. When applying futures methods such as scenario development, each stage represents a time interval or a personal paradigm for which scenarios, plans and strategies can be constructed. Because these time frames are independent of each other, scenarios can be developed for one or more future life stages and personal planning based on those scenarios can help an individual design strategies for achieving preferred futures and coping with life's events as they occur.

## **Contribution**

First, this thesis brings a useable set of life stages to the discipline of Foresight and Futures Studies that describes and illustrates the stages in the human life cycle in a format that is applicable to the study of personal futures. In addition to the original research conducted for this thesis, this research has explored the literature of several disciplines, including psychology (Jung, 1969), (Havighurst, 1972), , (Erikson, Erikson & Kivnick 1986),; history and arts (Opsopaus, 1995), (Shakespeare, 2000); geriatric medicine (Reuben et.al. 2000); gerontology (Baltes and Smith 2002), (Elder, 1999); sociology (Neugarten, 1968)and others to bring knowledge of life stages together in a form suitable to contribute to the study of personal futures within the discipline of Foresight and Futures Studies.

Second, the research found that the existing literature pertaining to life stages was incomplete and lacking detailed stages for life after about age fifty-five. Four new stages were identified and suggested to replace the stage that Erikson (Erikson, Erikson and Kivnick 1986) identified as "Old Age."

- Independent elder
- Vulnerable elder
- Dependent elder
- End of life stage

Although these proposed stages were defined specifically for the development of personal futures, they may have implications for other disciplines. The four life stages after age sixty, essential to the personal futures framework, were not found in any other discipline, although the terminology employed to describe the stages is common to the field of geriatric medicine. These designations and stages may or may not have value in other fields, but they serve an important purpose in the advancement of personal futures and are generally understood by the population they are expected to affect.

In summary, life stages offer several potential values to studies of personal futures:

- The stages of life represent foreknowns in an individual's life
- Each stage represents a time interval or paradigm for which a person can contemplate and plan for the future

- Life stages offer one way to visualize personal futures
- The boundaries between stages represent important change points in each individual's life

### 6.3.2 Personal domains

A conclusion drawn from this research is that life can be effectively divided into six levels or domains that parallel the lifeline, and that those six domains offer an important insight into each person's life that is beneficial to the study of personal futures. The research developed a concept (4.4.2) that each individual lives life on multiple levels, managing several aspects of life each day. The data suggested six categories that exist in the lives of all humans, from birth to death. The six categories or domains are:

- Activities
- Finances
- Health and care
- Housing
- Social
- Transportation

A second conclusion about personal domains finds that these six domains constitute the primary driving forces in an individual's life, each in varying intensity at different times in one's life. The six personal domains contribute a different type of foreknown than the major life events or life stages, in that the categories are continuing and therefore dynamic. This fact opens up an individual's life to analysis of each category in terms of creating a time series for each category, then using that time series to draw a trend line. From each of the trend lines, individuals have the opportunity to extrapolate into the future as described and illustrated in section 4.4.2.

The personal domains can also be viewed as components of the human lifeline or life course, wherein the domains pass together through each stage of life from birth to death.

The Human Lifeline											
B	Activities										D
I	Finances										E
R	Health										A
T	Housing										T
H	Social										H
	Transportation										
	Infant	Child	Adol- escent	Young Adult	Adult	Mid- Age	Inde- pendent Elder	Vuln- erable Elder	Depend- ent Elder	End of Life	

Figure 6.6 The human lifeline is visualized as a system including domains and stages.



The interviews (4.3.1) revealed that individuals were involved in managing many aspects of life daily. As the interviews were coded and compared or combined with other coding, six distinct categories emerged that could not reasonably be further reduced or combined. Observation (4.3.2) appeared to support the six categories described above and suggested some subcategories. The survey (4.3.3) explored personal domains only in a limited manner, asking specifically about preferences for providers and preferred locations for long-term care. The document study (4.3.4) and field research (4.3.5) each touched only briefly on personal domains, dealing primarily with definitions and facilities.

Each domain is made up of subcategories developed in the research. The subcategories, like the domains are the result of coding and constant comparison (Glaser and Strauss 1967) and are grounded in the original research. The table below lists several subcategories for each of the domains.

<b>Activities</b>
School, work or career, religion, sports, hobbies, travel
<b>Finances</b>
Income, expense, assets, liabilities, investments, risks
<b>Health</b>
Status, conditions or diseases, medications, diet and exercise, medical care, personal care
<b>Housing</b>
Home, care facility, community, nation, region
<b>Social</b>
Family, friends, co-workers, community, advisors
<b>Transportation</b>
Personal, car, public, special

*Figure 6.4 Table of domains with subcategories (from Figure 4.1) found in the research. Each subcategory may be composed of further subcategories.*

Although literature within each of the personal domains is abundant, literature relating to the concept of dividing life into levels or categories appears limited. Tough (1982) discusses “areas of change” (p. 25), which directly relates to futures theory, but does not develop the same concept. Elder (1999), Rajulton and Ravanera (1999) and others utilize the term “trajectories” in discussions of life course to describe periods of commitment in life to long-term events such as schooling, work, marriage or parenting. The concept of personal domains goes beyond trajectories in dividing life into categories, but as described by Glaser and Strauss (1967) and Glaser (1998), this concept of life domains appears to offer “Fit... Workability ... Relevance [and] Modifiability” (Glaser, 1998 p.18), specifically as the concept of personal domains relates to futures research.

Just as life stages added definition to the timeline of life by adding vertical lines across that timeline, personal domains add further depth by adding lines that are

parallel to the timeline, creating a matrix (4.3.4). The matrix shown below was the forerunner to the personal futures framework.

	<b>Independent Elder</b>	<b>Vulnerable Elder</b>	<b>Dependent Elder</b>	<b>End of Life</b>
<b>Activities</b>				
<b>Finances</b>				
<b>Health &amp; Care</b>				
<b>Housing</b>				
<b>Social &amp; Family</b>				
<b>Transportation</b>				

*Figure 6.5 A matrix composed of personal domains and four life stages illustrates the conceptual relationship between life stages and personal domains. In the development of personal futures, it is probable that only one life stage at a time would be developed, and worksheets would be devoted to that life stage*

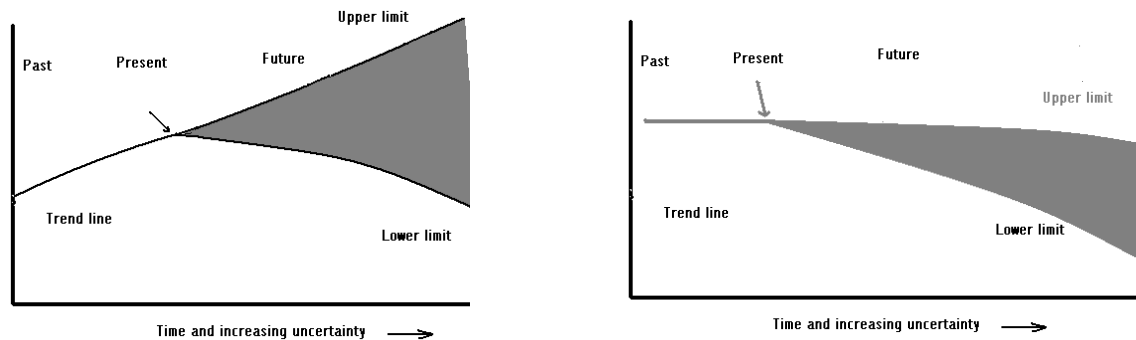
Life stages as part of the human life cycle represent a cyclic trend. Within that cycle, people cope with multiple levels, or domains, that are present throughout life (2.3.2).

These personal domains are valuable to the exploration of an individual's alternative futures. Although all people share the six listed categories, each domain will be unique for each individual. For example, a person who has been at a low economic level for many years with little in savings or investments has different prospects for the future after retirement than an individual who has a good income, a good pension or good investments. Similarly, an individual with a history of poor health, smoking or a chronic condition faces a different probable future than an individual who is healthy, fit and has no chronic diseases. In each case, the trend starts in the individual's past in order to suggest the future.

### **Application**

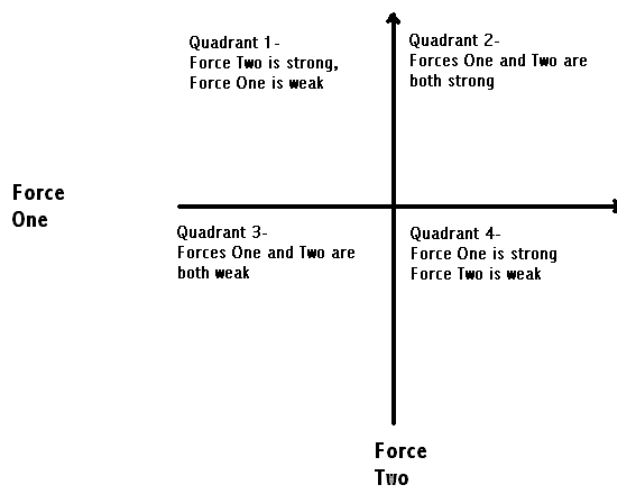
The personal domains bring a dynamic aspect to the study of personal futures, in that each domain constitutes a time line from the past to the present that can be extrapolated into the future (Taylor, 1991) and (Gordon, 1994) (See sections 2.4.4.1 and 4.4.2). Each domain has the potential to become a time series of personal data, which in turn can produce a graph line that indicates the direction or trend of that line at the present. Personal plans, experience and personal knowledge can suggest the upper and lower limits of the extrapolated trend line (Gordon, 1994). The distance between the two extrapolated lines tends to grow as the lines move away from the

present into the future, forming a cone. This area, a cone of uncertainty, is the area in which scenarios are constructed.



*Figure 6.6 Two views of the cone (dark gray area) that is formed between the upper and lower limits of the projected trend line. On the left, an upward trend line that could represent income, for example. On the right, the level to downward trend line might represent health.*

Personal domains are also driving forces (Schwartz, 1996) in an individual's life, which move from the past to the present and into the future. Trend lines indicate the direction in which the force is moving, which may be upward, downward or level.. The individual domains exert more or less power during different times of life. Driving forces can be plotted on two-axis matrices, as shown below, to suggest or identify scenario logics or plots (Ogilvy & Schwartz 2004) from which scenarios can be constructed. Further discussion of scenario development is found in section 2.4.4.



*Figure 6.7 The two axis matrix is frequently employed to identify scenario logics from driving forces. In this format, combinations of two of the six personal domains could be compared with other combinations. Health and finances, for example are often important driving forces in life. Having both forces in quadrant two could be desirable, while having both in quadrant three could be undesirable.*

### **Contribution**

Personal domains contribute a critical element to the construction of personal scenarios through the identification of driving forces in an individual's life and

through the extrapolation of personal trends. The creation of alternative scenarios is central to understanding one's personal futures and to planning for those futures.

The six described personal domains have not previously been recognized as separate trends or as a group of trends that carry through each individual life. These six personal domains hold several potential values for the study of personal futures:

- The categories represent constants in each person's life
- Each category can be quantified to provide a history of change throughout an individual's life
- Each category can be analyzed and a trend line produced that can be extrapolated to provide guides to the individual's future.

### **6.3.3 Life events**

This research has been concerned first with events in individual lives that have the potential to be anticipated well in advance of their occurrence and second, with events that represent change in the individual's life, even if temporary. For an infant, learning to walk, talk, eat and drink are significant events, although they are expected events and become more significant in their absence. Similarly, sexual awakenings, the ability to create or bear children, completion of school and learning social skills are all significant events for adolescents. Young adults face events that result from their decisions and set the course for their lives, including marriage, children, higher education and the start of careers. These are obvious events that occur in most people's lives, but other events are significant as well; the divorce of one's parents or the death of a parent, sibling, child or close friend. Accidents in motor vehicles and sports are a risk for young people, while heart attacks and cancer are a risk at mid-life and stroke, diabetes, pneumonia and Alzheimer's are risks for older people. But, along with the risk events there are the positive events including children, grandchildren, an "empty nest," retirement, travel and discretionary time.

Some events that are likely to occur in life were identified in the literature both for the probability of their occurrence and for their impacts (Miller & Rahe 1997) on individuals. The literature defined a number of health events and specific conditions that occur at different times of life, some identified by death statistics (Arias et al. 2003). The surveys (4.3.1.1) also identified several important events in the later stages of life. Although events can be defined or categorized by type or characteristics, all events can also be categorized within one or more of the personal domains and placed within one or more of the spaces on the matrix, filling out a framework for personal futures.

Turning point events change the direction of a person's life (4.3.1), and many of these can be identified as likely or not likely to occur in specific life stages. For example, the births of children are very likely to occur during the young adult and adult stages, less likely to occur during middle age, and not likely in the stages after middle age. Examples of events that the research identified as turning point events (4.4.3) include:

- Higher education
- Marriage
- Births of children
- Divorce
- Retirement
- Severe disability
- Death of a spouse

Other events are important while happening and may have an impact on individuals' lives, but don't necessarily change the direction of one's life (4.3.3.2).

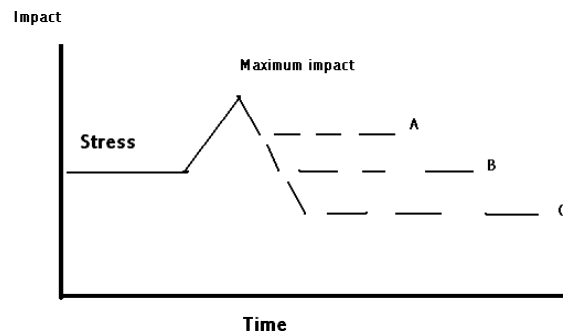
- Exceptional achievement (i.e. outstanding citizen, 50<sup>th</sup> anniversary, 100<sup>th</sup> birthday, university degree)
- Love affair
- Life threatening illness or injury
- Major chronic illness
- Major illness or injury of a spouse
- Giving or receiving care
- Financial crisis
- Natural or other disaster (i.e. Flood, hurricane, earthquake, fire)

Lists of important life events are not new knowledge by themselves, but in the context of the personal futures framework represent a contribution to personal futures methods, in large part because some life events are foreknowns and can be anticipated, and some life events signal a change of direction in a person's life and future

## **Application**

Potential future events must be considered both for their probability of occurrence and for their impact on an individual's life when constructing scenarios and during personal strategic planning. High impact events can be analyzed to determine the likely magnitude of the event, the duration of the event and the long-term impacts if any (Gordon, 1994).

For example, if an individual suffers a life-threatening illness, there is an immediate period of high stress (Maximum impact) for the individual and for the spouse. As the individual recovers, stress levels will normally decline, but may rest at a level above the original "normal" stress level (A in figure 5.8), return to normal or may even drop to a lower level (C in figure 5.8) than the original level.



*Figure 6.8 Impact of a stressful event, followed by three potential levels of recovery.*

If the effects of a heart attack or stroke are long lasting, and the spouse becomes a caregiver, the stress level may remain above normal for the spouse, even if the patient has returned to point “B” or even point “C.” This concept of calculating impacts and considering their long-term effects (Gordon, 1994) may be applied to many events in individual lives (2.4.4.1).

## **Contribution**

Individually, the life events discussed here are neither new nor unique, but collectively and in time frames, these events offer a view and perspective of the future for individuals that are both new and unique. This contributes to an understanding of future events that may shape an individual’s life, as an understanding of events, their probability of occurrence and their likely impacts has the potential to reduce the surprise factor and allow the individual to plan and prepare for future events.

## **Research questions summary**

Utilizing grounded theory methodology, this research first developed, then sought and found answers to, each of the three research questions about foreknowns in human life. These foreknowns act as constants among the many variables in life, providing some basis for considering the future and for arriving at conclusions to resolving the original problem that led to the research.

## **6.4 Conclusions about the research**

The research successfully uncovered and identified three groups of foreknowns consisting of life stages, personal domains and major life events. These three groups and the foreknowns contained within them were successfully organized into a framework upon which to construct personal futures, potentially simplifying the futuring process.

In practice, the development of personal futures will be a multi-step process that is based on the framework as developed by the individual, incorporating the individual’s personal history and present status. The framework of foreknowns combined with the individual’s history, plans and desires holds the information that enables the

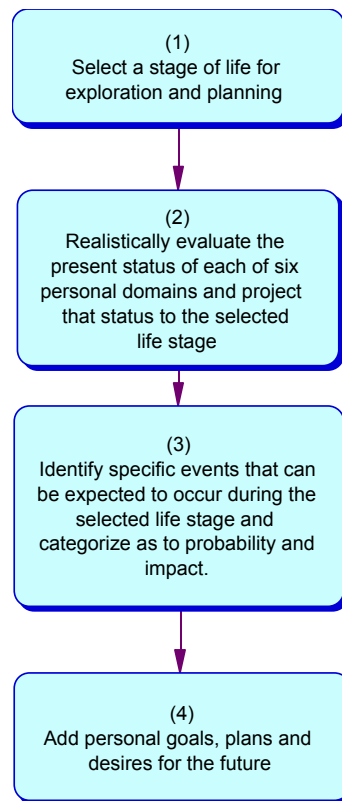
development of personal scenarios for any future stage in the individual's life. From the scenarios, the individual can develop strategies for dealing with the anticipated effects or impacts of each scenario. In addition, the individual can create a vision of a preferred future along with strategies and action plans for achieving that future.

### **6.3.1 The personal futures framework**

The combination of three types of foreknowns; life stages, personal domains and major life events composes a substantial collection of knowledge about what can be known or inferred about a typical human life. With this knowledge available as a guide, individuals will have a strong foundation upon which to anticipate their own personal futures. The personal futures framework combines these three elements of life to provide a graphic representation of the interaction and relationships between the elements.

Life stages provide time frames for research and planning, and delineate major changes of direction in an individual's life. Within each stage, events will occur which may be milestone events, change events or simply happenings. Some of these events will be minor while others may be traumatic, life changing or life threatening. Other events may trigger the change from one stage of life to the next. Throughout each stage and each event run the common threads of personal domains. As individuals learn to understand these relationships within this framework, they will also learn to understand much of what is likely to happen in their own future as they begin to apply futures methods to create their personal life strategy.

Each of the elements within this framework, the stages of life, the six continuing life forces, the major life events and the framework itself represent advances in futures methodology. A four-stage model illustrates the role of the personal futures framework in practice.

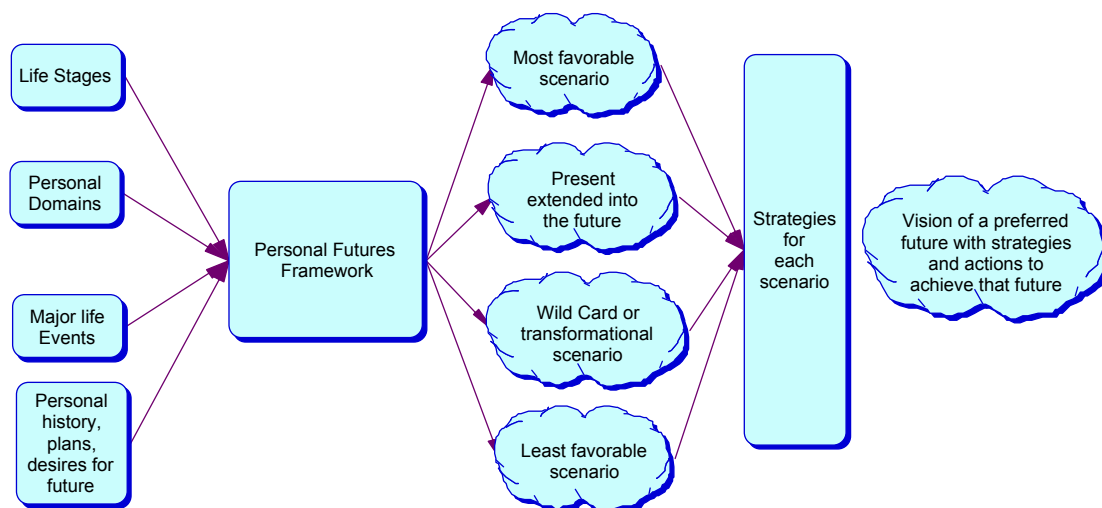


*Figure 6.9 Proposed model for constructing a personal framework.*

This framework represents three different types of foreknowns that can reasonably be anticipated in anyone's personal futures. With the knowledge provided by this framework, conjecture about the future is a next logical step for an individual. Futures methodology, specifically scenario development, facilitates the exploration of scenarios of plausible personal futures based on the data provided by each individual's framework.

The model below illustrates how the information derived from the individual's history, plans and desires for the future is combined with the framework of foreknowns to create the individual's personal futures framework. The information from the personal framework provides the data from which four personal scenarios can be developed. From the four scenarios, plans and strategies can be produced along with a vision of the individual's future and action plans to achieve that future.





*Figure 6.10 Diagram showing components that make up the personal futures framework and the outputs that result in a personal plan for the future.*

The research conducted in Chapter 3.0 did not address the framework directly, but concentrated on identifying the components that make up the framework, including their related categories and attributes, and their relationship to one another. Section 4.5 recognizes the framework and brings the components together in a manner that illustrates those relationships as shown in Figures 4.30. The three elements of the framework, life stages, personal domains and life events are grounded in the research data and supported in the literature, as discussed above.

The combination of the three component parts into a framework brings us back to the literature that inspired the search for foreknowns:

*This is how we place foreknown elements on the future scene. These foreknowns act as props and also as constraints, forming a frame within which our thought represents the future.*  
Bertrand de Jouvenal (1967, p.114).

De Jouvenal's work was influential throughout this research, and led to the search for foreknowns in human life that could provide guidance to the exploration of personal futures. This search for foreknowns or constants among life's variables was fundamental to the research problem (Section 2.2). Dator (2001) also guided the research with his assertion that futures result from the interactions of events, trends, images and actions (Section 2.4.1), suggesting some of the foreknowns that would be needed.

## Application

For practitioners and for individuals, this framework, combined with personal knowledge, provides a base of foreknowns from which reasonable projections can be made into the future. The life stages create a time line and series of time intervals that are defined by important changes in life. Each life stage is a time frame for which personal scenarios can be constructed utilizing accepted futures methods. The personal domains are the dynamic of the framework, bringing the individual's past and present into focus for extrapolation into the future. The extrapolations of each of

the domains, with their resulting cones of uncertainty suggest the driving forces and the directions of their potential impacts on the individual in the future. The life events take the first steps toward filling in the future in any life stage, encouraging each persona to define impacts and probabilities that apply during the life stage under consideration.

From this personal base of information, scenarios representing plausible futures can be constructed for any life stage. For each scenario, strategies can be developed to deal with high impact events and high probability events. Subsequently, the individual can construct a vision of a desirable or preferred future and create a plan to achieve that future, defining actions that should be taken, identifying events that will indicate the direction of the future and preparing contingency actions that can be taken.

## **Contribution**

The framework brings a new dimension to the discipline of Foresight and Futures Studies by providing three types of foreknowns that assist and encourage the development of personal futures, both for individuals and as a field of study within Foresight and Futures Studies.

The framework introduces an organized collection of foreknowns of sufficient breadth and depth to make feasible and practical the development of plausible futures for individuals and groups of individuals who want to explore and understand their own personal futures.

## **6.5 Implications for theory**

This research has little impact on futures theory, but does appear to confirm the scalability of futures theory and several futures methods to the smallest scale, the future of a single individual. Importantly the results of the research enable the application of futures methods to individuals by reducing the complexity barrier that has existed. By simplifying the futuring process for individuals, it is possible for futures theory to reach a much broader base of understanding and participation.

This research does suggest that there is a substantial gap in Erikson's (1986) theory of life stages, and proposes to fill that gap by replacing Erikson's last life stage, Old Age, with four new life stages. Although the system of life stages proposed here is intended for personal futures research, there may be implications for other disciplines.

There is also an implication in the research that at some point, the concepts discussed here, along with futures methods and concepts would be learned by or taught to individuals who seek to understand their futures. Three methods by which individuals might conduct personal futures research were considered but not discussed in depth in

this thesis as learning and teaching was considered outside of the scope of the research. Those three approaches are:

- Research conducted entirely by the individual, based on reading and understanding the conclusions of this thesis and futures methods.
- One-on-one instruction of the individual by a knowledgeable futurist.
- Personal futures workshops or classes conducted by a futurist or knowledgeable facilitator.

Personal futures research by individuals is both reasonable and practical, but has limitations and would be time consuming unless the individual has access to worksheets, workbooks or other step-by-step learning tools. One-on-one instruction is also practical, but would probably be prohibitively expensive for most people. For those who can afford it and desire privacy in the process, this may be a reasonable approach.

Robert Jungk and Norbert Mullert (1987) developed the concept and practical application of futures workshops to help people understand collectively how they could gain some understanding and control of their own futures (also see Sec.2.4.4). The personal futures workshop has the potential to be an effective vehicle for teaching people about conducting personal futures research and helping them to develop personal strategic plans. This concept was part of the mental model throughout the conduct of this research. The workshop approach has several benefits:

- Cost of instruction and learning time are both reasonable
- The concepts and conclusions presented in this thesis enable and presumably encourage the development of personal futures in groups
- Participants benefit from the experience and leadership of a knowledgeable futurist or facilitator
- An interchange of experiences and ideas with other students or participants enhances the learning process and the planning process

The workshop approach is also consistent with learning methods inspired by Vygotsky's concept in which a student first follows the example of a teacher or more accomplished peer, then develops the confidence to collaborate in the learning process with the teacher or peers, and finally develops the ability to accomplish the learned tasks or methods without assistance (Wells 1999). Possibly more important to learning success, is the relevance of the workshop to the individual's life.

In workshops, students learn about concepts and methods from a facilitator or instructor. As the workshop moves on, the workshop leader becomes more a collaborator with the students as they discuss or work out matters together. Finally, the workshop leader becomes a facilitator of the student's ideas as the students arrive at their own conclusions and at the futures they envision for themselves. For any of these methods, a student workbook including worksheets for each of the learning

areas may be helpful. An example of a student workbook, used to present these personal futures concepts to members of the World Future Society in July of 2005 is included in Appendix C.

## **6.6 Implications for the practice of Foresight and Futures Studies**

Prior to this research, little apparent research has been devoted to the study of personal futures or to the application of futures methods to individual lives. The concept of a framework of established foreknowns has not been a part of futures practice in the past or at present, but the concept may have some influence in areas of futures research beyond personal futures. The framework of foreknowns introduces a systematic approach to research that is done prior to the application of major futures methods. At the same time that the framework offers a systematic method, the system consist of guides, not answers. This is important, and means that each individual will develop a different future, or group of alternative futures, than anyone else. Although there may be similarities of events within cohorts, each individual will research, develop and prepare for his or her own future.

The framework of foreknowns introduced here offers a new approach to the study of personal futures that will substantially simplify what is otherwise a complex and time consuming process. Simplifying the futuring process may make it economically feasible for futurist practitioners to help individuals to explore their own futures, either individually or in groups, suggesting the possibility of expanding the scope and understanding of Foresight and Futures Studies.

## **6.7 Limitations**

From the standpoint of Foresight and Futures Studies, an obvious limitation of the personal futures framework and the proposals for conducting personal futures described in this thesis is that the described personal futures process relates only to the individual and to matters directly related to the individual, with little consideration given to larger outside influences. The proposals put forward here are intended to introduce individuals to the futuring process and to how that process can give the individual some foresight into events that can be dealt with directly. This is in accord with the admonition of Peter Schwartz (1991) to “begin from the inside out” (p. 241). Understanding and dealing with outside forces such as social change, technology advancement, the economy, ecology and politics are issues outside the scope of this research and are to be dealt with on another level.

The survey research conducted for this thesis was based on a population of U.S. citizens, primarily Caucasian people over age sixty and observed to be largely in the middle or upper economic levels. Consequently, some of the conclusions drawn here may not be applicable to people of all ages, races, cultures or economic classes.

## 6.8 Implications for methodology

The experiences of this research suggest that grounded theory, as a methodology, offers considerable benefit to exploratory qualitative research. This research began with a simple search for foreknowns, not knowing where that search might lead. Analysis of interviews, observation, documentation and the resulting memos and notes led to codes for the initial classes of data. Comparisons of the codes created categories and further comparisons created broader categories, leading eventually to concepts and conclusions. The result is a practical approach to studying personal futures that is grounded in real life and real experience.

Generalizability is an accepted standard of validation in positivist or experimental research, but is considered by many an unreasonable impossible standard in qualitative research or any discussion of the future. Yet, in a study such as this one, there is a stated desire to find common areas in life and broad applicability of the foreknowns discussed here. Glaser and Strauss (1967) emphasize that grounded theory leads to concepts and theory that “fit and work” (p.5). Glaser (1998) goes on to add “relevance” and “modifiability” (pp. 18-19) as criteria for judging grounded theory. He states further that “Fit is another word for validity which means does the concept represent the pattern of data it purports to denote (sic, p.236).

The concepts presented in this thesis do appear to “fit” real life and work well as tools for developing personal futures. The concepts also appear relevant to the study of personal futures and are open to modifiability. In fact, futures researchers are encouraged to expand and modify this research in efforts to make futures methods more usable and valuable to individuals.

Aside from the quantitative/qualitative debate over generalizability, several factors were considered in attempting to assure broad applicability of the concepts presented here.

- Population validity, a positivist term, was sought by interviewing and observing people in all age groups and from diverse socioeconomic and cultural backgrounds.
- Ecological validity, also a positivist term, was sought by expanding the interviews and observations to multiple countries and multiple social or socioeconomic environments. Prior to this research, the author had traveled extensively, observing people and culture in over thirty different countries. During this research, the author conducted interviews and or observations in an additional six countries. In addition, the author has traveled, interviewed and observed widely throughout the United States.
- Interviews were conducted with academics and professionals to understand and verify the author’s understanding of what had been learned during the research and the validity of the concepts.
- The literature research and review, in addition to providing support to the research concepts also provided generalization from other disciplines.
- Peer reviewed publication and presentations of the research concepts further generalized the concepts within the Foresight and Futures Studies community.

Throughout the research, there was a constant search for facts or concepts that would contradict or invalidate the research concepts. In the case of the proposed four life stages, exceptions were found, and have been detailed in the research. But the pattern appeared valid, and each individual has the potential to face each of these stages. This potential is important to planning and preparing for the future.

The concept of personal domains as forces in life appears to be very strong and no exceptions were found. At the same time, this concept remains open to modification by future researchers.

The concept of life events found that many events are cultural in nature. Coming of age celebrations is only one example. Even events that appear certain in an individual's life, such as death of a parent, may not be future events if they have already occurred in the past. As a consequence, specific potential events can be suggested, but each individual will have to consider the probability and impact of future events.

A factor to generalizability within the context of the study of personal futures is the fact that any individual studying his or her future has the freedom and control to exclude any factor from any of these concepts that does not appear to be meaningful in his or her life.

If the study of personal futures becomes a viable field of interest within Foresight and Futures Studies, it is to be expected that over time other researchers will improve and expand upon what has been developed in this research, but because the fundamental concepts presented here are grounded in the realities of human life, they should remain relevant.

## **6.9 Further research and development of personal futures**

Although this research has identified three categories of foreknowns, future research should seek to expand the number and types of foreknowns that could benefit futures research. A specific piece of research that should follow this is the development of tables of probabilities of events occurring during each stage of life

The research included observations and interviews of people at many economic levels in a number of societies and cultures, but greater attention should be given to the personal choices available to the very poor, and how poverty affects personal futures. This research was based largely on interviews and observation of older middle and upper middle class individuals, in part because this population has had considerable experience with many aspects of life and has enjoyed sufficient resources to have the benefits of multiple choices in making life's decisions. Education and intelligence might also be explored as factors in considering personal futures.

There is a need to develop materials and methods for the study of personal futures. A sample of a trial workbook is in Appendix C, which can be used by a facilitator in workshop settings. This workbook needs to be expanded to be more effective for

facilitators and to the point that individuals can use it to work on their own or with limited guidance. Images of life in each of the stages as well as images of typical life events should be helpful additions to the workbook or to a visual format for workshops.

An important element in bringing personal futures methods to individuals will be the education of practicing futurists and academic futurists to the concepts and conclusions introduced in this chapter. If futurists become interested in personal futures, there is a greater potential to develop more tools and methods to expand the awareness and use of personal futures methods.

The conclusions drawn here should be tested within other populations, including other cultures and economic classes to develop additional foreknowns that are specific to those cultures.

## **6.10 Summary**

Exploring the future is about exploring change, because if there is no change, the future is already known. Change, whether anticipated or unknown, forms the future, and this paper has explored three different types of change in human life.

The first area of change explored in the research was cyclical change; in this case the changes that normally occur with increasing age in the human life cycle. These changes occur within the individual, starting with growth and development, sexual maturity, ageing and eventually decline and death. These are the stages within the human life cycle, and can be known, understood and anticipated by individuals. These stages are generalizable to nearly all humans who live through a normal life cycle.

The second area of change in the human life divided life into six levels, or domains. Each domain extends from the beginning of life to death and changes in a continuous manner. Changes within a domain are related to whatever has gone before and can thus be projected into the future with sufficient clarity to provide a range of plausible future changes in the domain. Changes within a domain are often a matter of personal choice, allowing the individual some influence over his or her personal future. The personal domains are also generalizable to nearly all humans.

The third form of change is based on events that occur within an individual's life. The events studied here first emphasized those events that can be reasonably anticipated, then emphasized events that may have lower probability of occurrence during a specific life stage or life, but have high impacts when they do occur. Emphasis was also placed on life altering events that change the course of one's life and on intentional events that are the result of choice. Many life events are generalizable, but other events will vary with cultures and countries.

Combining these three types of change into a matrix creates a reasonable framework of life; a framework that individuals can use as a starting point to understanding their personal futures. Starting with the framework, individuals can add their own desires, goals, plans and choices to obtain plausible views of their future.

This approach to personal futures offers individuals and futurist practitioners a method with which to effectively study and plan for personal futures that has not been previously available, and offers the possibility of opening the discipline of Foresight and Futures Studies to the expanded study of personal futures based on tested and accepted futures methods and theory.



# Appendix A

## **A-1 Interview subjects**

For the most part, each item below represents one or more different individual and one or more interviews. Some people were interviewed several times over several years. Some interviews were less than fifteen minute, but most were longer. Some small-group lectures by professionals are included, as notes were taken and personal conversations followed the lectures.

### **Interviews of elders**

**General effect and impacts of aging**

**Stages**

**Attitudes**

**Social involvement**

**Exercise**

**Stroke**

**Abuse**

**Scams**

**Heart attack**

**Emphysema**

**Cancer**

**Nursing homes**

**Insurance**

**Finances**

**Travel**

**Suicide**

### **Interviews of medical professionals**

**ER                      Testosterone therapy**

**Stroke**

**Heart attack**

**Geriatrician      Typical geriatric workup**

**Medications**

**Urologist-        Prostate enlargement**

**Prostate cancer**

**Male sexual problems**

**Ophthalmologist-**

**Cataracts**

**Viscous**

**Retina detachment**

**Lasic surgery**

**Electronic vision**

**Macular degeneration**

**General practitioner**

**Stroke**

**Blood sugar/hypoglycaemia**

**Diabetes**

<b>Surgeon</b>	<b>Health care system in Brazil</b> <b>Haemorrhoids</b> <b>Joint repair and replacement</b> <b>Arthritis</b>
<b>Oncologist</b>	<b>Cancer treatments</b> <b>Pain relief</b>
<b>Anaesthesiologist</b>	<b>Pain relief</b>
<b>Neurologist</b>	<b>Spinal column</b> <b>Pain relief</b>
<b>Nurses</b>	<b>Nursing home care</b> <b>Acute care</b> <b>Assisted living care</b> <b>Cardio vascular preventive care</b>
<b>Interviews of other professions</b>	
<b>Lawyer-</b>	<b>Elder law</b> <b>Probate</b> <b>Wills/trusts</b> <b>Instructions to physicians</b> <b>Power of attorney</b>
<b>Pharmacist</b>	<b>Poly-pharmacy</b> <b>Genetic medicine</b>
<b>Academics</b>	<b>Ageing</b>
<b>Insurance</b>	<b>Long-term care</b> <b>Medi-gap</b>
<b>Therapist-</b>	<b>Weight training</b>
<b>Dietician</b>	<b>Nutrition</b>
<b>Tour guide-</b>	<b>Retirement, pensions, and medical care in Spain</b>
<b>Interviews of futurists</b>	
<b>Students</b>	<b>Personal futures</b>
<b>Academics</b>	<b>Personal futures</b> <b>Ageing impacts</b>
<b>Practitioners</b>	<b>Medical futures</b> <b>Workshop techniques</b> <b>Futures methods</b>
<b>Writers</b>	<b>Teen futures</b>
<b>Interviews at Midlife</b>	
	<b>Investments</b> <b>Retirement planning</b> <b>College planning</b> <b>Emotional adjustments</b>
<b>Interviews of adults</b>	
	<b>Career planning</b> <b>Family</b>
<b>Interviews of young adults</b>	
	<b>Education</b> <b>Career</b> <b>Marriage</b>

**Interviews of teens**

- Family**
- Social adjustments**
- Technology**
- Education**
- Family**
- Drugs**
- Suicide**
- Personal future planning**

## **A-2 Participant Observation**

Observation research was conducted largely with older people and largely in the Harlingen, Texas area. Observation took place in a variety of settings and situations that included:

- Individuals
- Groups, large and small
- Meetings, large and small
- Lectures
- Tours
- Cruise ships
- Conventions
- University campus
- Travel modes and facilities

Prior to beginning the research, I had travelled extensively and spent time in a number of countries around the world. During those travels, I had observed a variety of cultures, some in depth. I continued to travel during the course of the research, and this accumulated experience with other cultures and varied economic levels provided a valuable background for this research.

## **A-3 Focus groups**

In July, 2001, in response to an invitation from Seniors' Choice, a presentation was made to the attending membership, about 35 people. This meeting provided an opportunity to focus on the two concepts:

- The acceptability of the concept of four life stages after age sixty.
- Selection of diagramming concept for ease of comprehension

At the conclusion of the presentation and following discussion, a brief questionnaire was distributed to the audience and after excluding ineligibles because of age, 21 valid questionnaires were evaluated. Some of the questions related to presentation methods, but a key question that related to life stages was later used in the systematic sample survey.

*Question:* Did you find the Mind Map diagrams to be:

	<b>Responses</b>	<b>Percent (n=21)</b>
Very helpful in making information clear	4	19.0
Helpful in making information clear	10	47.6
OK	7	33.3

Confusing	0	0
Not any help at all	0	0

Question: Did you find the Alternatives for the Future Worksheet to be:

	<b>Responses</b>	<b>Percent (n=21)</b>
Very helpful toward understanding the future	10	47.6
Helpful toward understanding the future	9	42.9
OK	2	9.5
Confusing	0	0
Not any help at all	0	0

These two questions about Mind Maps and Futures Worksheets sought to learn how audiences were responding to various presentation techniques. Since the intended result of this thesis is to produce tools that individuals can use to explore their personal futures, the manner of presentation is a factor in how helpful the tools will prove to be.

Question: Do you expect to use any of these worksheets after you leave here today?

<b>Use worksheets</b>	<b>Respondents</b>	<b>Percent (n=21)</b>
Yes	16	76.2
No	3	14.3
Uncertain	1	4.8
No answer	1	4.8

This response suggested considerable interest among attendees in the concepts of personal futures that were discussed at this meeting.

Question: Today we talked about four stages of life which are suggested by the research I've conducted so far:

- Independents stage
- Vulnerable stage
- Dependent stage
- End of life stage

Based on your experience with your life and the lives of your friends and relatives. Do you feel that these four stages:

<b>Response</b>	<b>Respondents</b>	<b>Percent (n=21)</b>
Represent life after 60 accurately	19	90.5
Seem OK	2	9.5
Don't really compare with the reality of life after 60	0	0
Don't make any sense at all	0	0

This response, though small, provided support for the hypothesis about life stages early in the research. This question was later included in the systematic sample

survey. The very high approval rate from this group may reflect the value of a complete explanation.

Demographic questions and results:

*Are you*

Male	12	57.1
Female	9	42.9

The percentage of males is higher in this group than found in the surveys conducted of this frame. No clear explanation for this ratio was apparent.

*What is the year of your birth?*

Range	Mean	Median	Mode	No answer
1912 to 1937 Age 64 to 89 in 2001	1927 74 in 2001	1930 Age 71 in 2001	1926,1935 (bimodal) Ages 75 & 66	0

This questionnaire asked respondents for their year of birth rather than asking for an age bracket. In surveys, this proved valuable when analyzing survey questions.

## Focus group 2

Leeds Metropolitan University - PhD students, advisors and interested faculty members.

Focus

Life stages

Life areas (later, Domains)

Life events

## Focus group 3

UHCL students and faculty of Futures Studies program

Focus:

Building a framework

Adapting futures methods to personal futures

## A-4 Field research- facilities visited

During the course of the research, people in general, but older people in particular, were observed in a variety of locations other than their homes. Both the facilities and the people within were observed.

Clinics

Hospitals

Emergency rooms

Nursing homes  
Assisted living facilities  
Continuing living facilities  
Cruise ships

### **A-5 Documents studies**

A number of documents were studied for this research, most relating to ageing and health care. In most cases, each heading below represents several different documents that were studied and compared.

#### **Wills**

#### **Trusts**

#### **Instructions to physicians**

#### **Medical power of attorney**

**Contracts:** Long-term care insurance  
Medical insurance  
Homeowners insurance

#### **Proposals and brochures:**

Assisted living  
Continuing living  
Nursing homes  
Hospice  
Adult day care

# Appendix B

## Surveys and Questionnaires

This appendix contains copies of the questionnaires distributed during each of the surveys conducted during the course of this research, as well as the results for each survey. The trial surveys, those conducted before the systematic sample survey of 2002, provided an opportunity to test the survey procedures, the physical handling of returns and the use of the SPSS software. In addition, the trial surveys provided an opportunity to collect background information on aging and to test questions in various formats prior to the systematic sample survey

In addition, the trial surveys were very helpful to the construction of the questions used in the final survey. The surveys began very early in the research, before the key categories were formed. Consequently, questions tended to be exploratory, trying to find out what life after sixty was like and how it might be different from the rest of life. In the first survey, questions focused on health, events and the extent to which people were thinking about the future. An important lesson that was learned as a result of the trial surveys was that closed questions are dependent on the knowledge of the preparer to learn anything new. If the researcher doesn't ask the right question, or ask the question in the right way, responses will have little value to the research.

### **First research survey**

The first of the research surveys was conducted to test all aspects of conducting a survey of the Seniors' Choice membership and to provide experience to everyone involved. The 8% response rate (192 responses from 2348 questionnaires mailed) was too low to consider the data statistically significant, but the data proved useful in providing background information about ageing and members of Seniors' Choice. Results are presented following the questionnaire.

### **Exhibit I: Questionnaire for Seniors' Choice 2001 Trial Survey**

#### **Research Survey**

The following survey is part of a doctoral research project being conducted by Verne Wheelwright, a member of Seniors' Choice. All information received in this survey will be treated confidentially and no individual information will be released. If you have any questions about this survey, please call Verne at 956-423-5758.

Participation is entirely voluntary. You may complete this questionnaire and return it by mail, bring it to the Senior's Choice office or you may complete an identical survey online at [http://www.pollcat.com/ty0lffo14w\\_a](http://www.pollcat.com/ty0lffo14w_a)

If you would be interested in participating in further surveys or research relating to life after age 60, please include your name and address on a separate piece of paper

with this survey or send an email to [wastepaper@msn.com](mailto:wastepaper@msn.com) indicating that you are willing to participate in future surveys.

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- 1- What is your present state of health?
  - a- Healthy and active (exercising, sports, etc.)
  - b- Reasonably healthy, but not physically active or partially disabled
  - c- Health is not very good, but able to get out
  - d- Very poor health, confined to residence or nursing home
  - e- Presently under hospice or terminal care
- 2- Following is a partial list of life events or life stages that are associated with being older. Please mark all that you have experienced since age sixty.
  - a- Enjoyed good health and an active life.
  - b- Became primary Caregiver to child or grandchild.
  - c- Became primary Caregiver to spouse
  - d- Completely retired from work
  - e- Started a new career or business
  - f- Enrolled for additional education
  - g- Became a widow or widower
  - h- Received care from spouse (more than 3 months)
  - i- Received care from children or grandchildren (more than 3 months)
  - j- Became substantially disabled (at least partly dependent on others)
  - k- Traveled extensively
- 3- Have you experienced any of the following since age sixty? (Mark all that apply)
  - a- Heart attack or heart surgery
  - b- Fall resulting in one or more broken bones
  - c- Diabetes
  - d- Substantial loss of hearing or vision
  - e- Cancer
  - f- Stroke
  - g- Other \_\_\_\_\_

(over)

- 4- In what ways have you prepared yourself for life or changes after age sixty? (Mark all that apply)
  - a- I haven't really prepared, but accept life as it comes
  - b- Planning for recreation, travel, education
  - c- Financial planning; budgeting, investments, business
  - d- Regular exercise and fitness.
  - e- Learned about or planned for health events I may face
  - f- Long term care arrangements or insurance
  - g- Changed residence or have planned for a future move
  - h- Planned or made home modifications for future use
  - i- Other \_\_\_\_\_



- 5- In which of the areas listed above (4) have you specifically benefited from this planning or preparation? (Mark all that apply) a. b. c. d. e. f. g. h. i.

Comments \_\_\_\_\_

- 6- Are you presently working or self-employed?

a- Yes

b- No

- 7- Which of the following documents have you completed and signed? (Mark all that apply)

a- Directive to Physicians

b- Medical Power of Attorney

c- Will

d- None of the above

- 8- What is your age?

a- 60 to 69

b- 70 to 79

c- 80 to 89

d- 90 to 99

e- 100 or more

- 9- What is your primary state of residence? \_\_\_\_\_

- 10- The Harlingen Chamber of Commerce is considering a "Senior Enrichment" program for seniors, and is very interested in whether you might participate.

Would you be interested in any of the following? Mark all that apply

a- Valley history, events, facilities and points of interest.

b- Community improvement, leadership and involvement

c- Training in computers and technology

d- Crafts, hobbies, fitness, field trips

e- Other or

comments \_\_\_\_\_

Thank you for participating in this survey. The results will be published in a future Seniors' Choice newsletter. Please mail or bring this completed form to:

Seniors Choice, Valley Baptist Medical Center

P.O. Drawer 2588, Harlingen, TX 78551

## Responses to questionnaire for Seniors' Choice 2001 Trial Survey

Survey question: What is the present state of your health?

	Responses	Percent (n=192)
Healthy and active	125	65.1
Reasonably healthy, but not physically active or partially disabled	55	28.6
Health is not very good, but able to get out	10	5.2

Presently under hospice or terminal care	1	.5
No answer	1	.5

*Survey question:* Following is a partial list of life events or life stages that are associated with being older. Please mark all that you have experienced since age sixty.

	<b>Responses</b>	<b>Percent (n=192)</b>
Enjoyed good health and an active life	155	80.7
Became a primary caregiver to a child or grandchild	7	3.6
Became a primary caregiver to a spouse	36	18.8
Completely retired from work	140	72.9
Started a new career or business	16	8.3
Enrolled for additional education	24	12.5
Became a widow or widower	59	30.7
Received care from spouse (more than 3 months)	11	5.7
Received care from children or grandchildren (more than 3 months)	2	1.0
Became substantially disabled ( at least partially dependent on others)	4	2.1
Traveled extensively	94	49.0

*Survey question:* Have you experienced any of the following since age sixty?

	<b>Responses</b>	<b>Percent (n=192)</b>
Heart attack or heart surgery	38	19.8
Fall resulting in broken bones	23	12
Diabetes	16	8.3
Substantial loss of hearing or vision	47	24.5
Cancer	23	12.0
Stroke	8	4.2
Other		

These two questions both deal with life events. In this survey, the events are suggested in the questionnaire, whereas the systematic survey asks the respondent to

provide a list of important positive events and a list of important negative events. The method used here tends to focus on frequency of events, while the approach taken in the systematic survey was intended to emphasize the importance of events.

Survey question: In what ways have you prepared yourself for life or changes after age sixty? (Mark all that apply)

	<b>Responses</b>	<b>Percent (n=192)</b>
I haven't really prepared, but accept life as it comes	48	25.0
Planning for recreation, travel, education	73	38.0
Financial planning; budgeting, investments, business	127	66.1
Regular exercise and fitness	112	58.3
Learned about or planned for health events I may face	73	38.0
Long term care arrangements or insurance	55	28.6
Changed residence or have planned for a future move	91	47.4
Planned or made home modifications for future use	29	15.1

Because the purpose of the research is to develop tools for understanding and preparing for personal futures, this question was included to explore the respondents' attitudes toward planning. In retrospect, the words "but accept life as it comes" probably should not have been included in the first choice as it may change the connotation of the question to some people.

Of the 48 persons who indicated that they "hadn't really prepared," the following number also indicated that they had:

<b>Planned</b>	<b>Persons</b>
Planned for recreation, travel, education	9
Conducted financial planning; budgeting, investments, business	15
Planned for regular exercise and fitness	16
Learned about or planned for health events they might face	14
Planned long term care arrangements or insurance	12
Changed residence or planned for a future move	15
Planned or made home modifications for future use	5

This suggests that some people have actually planned for their futures to a greater extent than they realized.

Survey question: In which of the areas listed above have you specifically benefited from this planning or preparation? (Mark all that apply)

<b>Benefited from planning</b>	<b>Respondents</b>	<b>Percent (n=192)</b>
I haven't really prepared, but accept life as it comes	13	6.8
Planning for recreation, travel, education	55	28.6
Financial planning; budgeting, investments, business	83	43.2
Regular exercise and fitness	80	41.7
Learned about or planned for health events I may face	32	16.7
Long term care arrangements or insurance	23	12.0
Changed residence or have planned for a future move	58	30.2
Planned or made home modifications for future use	20	10.4

These responses indicated that many people believed that they had already benefited from planning that they had conducted sometime in the past. The two most important planning categories, in both cases, are financial planning and planning for physical fitness.

Survey question and results: Are you presently working or self-employed?

	<b>Respondents</b>	<b>Percent (n=191)</b>
Yes	23	12
No	168	88
No Answer	1	-

The obvious question, what percentage of respondents is below retirement age, cannot be answered because this survey asked for ages within brackets. The age bracket 60 to 69 includes 26.2% (50) of the respondents. In later surveys, respondents were asked for their year of birth in order to avoid this type problem.

Survey question: Which of the following documents have you completed and signed?

<b>Documents</b>	<b>Responses</b>	<b>Percent (n=192)</b>
Directive to physicians	115	59.9
Medical power of attorney	104	54.2
Will	163	84.9
None of the above	12	6.3

A large percentage (84.9%) of respondents had prepared and signed a will, providing for the disposition of their estates. A substantially smaller percentage (59.9%) had signed a directive to physicians, a document that generally asks that no heroic measures or resuscitation take place if death within six months is the likely outcome. A smaller percentage (54.2%) had signed a medical power of attorney, a document that gives another person authority to act on behalf of an individual who is not able to respond or make decisions. Reasons for signing or not signing such documents were not explored further in subsequent surveys as subject bears more on strategy than on answers to research questions.

*Demographic questions and results:*

**What is your age?**

<b>Age</b>	<b>Respondents</b>	<b>Percent (n=192)</b>
60 to 69	50	26.0
70 to 79	96	50.0
80 to 89	44	22.9
90 to 99	1	.5
100 or more	0	0
Missing	1	.5

This question asked for ages within intervals, a practice seen in commercial surveys and suggested in texts (Bailey, 1994), (Salant & Dillman, 1994). It became apparent that analysis of any question by cross-tabbing with age would not be possible. Subsequent surveys solved this problem by asking for the respondent's year of birth.

*Survey question:*

*What is your primary state of residence?*

<b>State</b>	<b>Responses (n=192)</b>	<b>Percent</b>
Texas	159	82.8
Missouri	2	1.0
Iowa	2	1.0
Michigan	3	1.6
Wisconsin	4	2.1
Minnesota	4	2.1
Wyoming	2	1.0
IL, KS, Man, ND, OH, OK, PA(1 each)	7	3.7

The response to this question was different than expected, as it is believed that a high percentage of the Seniors' choice members are "winter Texans" and the number of people with residences outside Texas was expected to be much higher. Several possibilities exist:

People from out of state did not respond

People who live "out of state" part of the year are registered as Texas residents (taxes in Texas are lower than many other states)

Respondents misunderstood the question

This question was not pursued further at this time, as it was not considered relevant to the research.

Survey question:

*The Harlingen Chamber of Commerce is considering a "Senior Enrichment" program for seniors, and is very interested in whether you might participate. Would you be interested in any of the following?*

**Results**

Activities	"Yes" responses	Percent
Valley history, events, facilities and points of interest	94	49.0
Community improvement, leadership and involvement	27	14.1
Training in computers and technology	100	52.1
Crafts, hobbies, fitness, field trips	90	46.9

This question was included at the request of the Harlingen Chamber of Commerce, but added some insight as to activities and interests of the respondents. The Chamber of Commerce subsequently created a series of programs and activities for senior citizens based on the survey results.

## **Exhibit II: Survey results**

**Following is the text of a brief article included in the Senior's Choice newsletter following the 2001 survey:**

Thanks to all of you who responded to the survey in the last Senior's Choice mailing. This is very helpful. Very briefly, here are some results. If you would like more details, or if you would like to participate in more surveys for my research, send me an e-mail at [wastepaper@msn.com](mailto:wastepaper@msn.com) or send a note to 1917 Guava Circle, Harlingen 78552.

1-What is your present state of health?

65.2% said you are healthy and active while 28.8% said you are reasonably healthy, but not active.

2-Life events and life stages experienced since age sixty.

73.4% have fully retired, 49.5% have traveled extensively and 29.9% have become a widow or widower. 79.9% have enjoyed some good health since sixty.

3-Specific health events experienced.

24.5% have suffered a substantial loss of vision or hearing, although many have recovered. 19.0% have suffered heart attacks and 12.5% have fallen and broken bones. Note that falls is higher than cancer at 11.4% and strokes at 4.3%.

4-In what ways have you prepared for life after sixty?

Although 25% have not really planned for their lives after sixty, 65% have done financial planning, 59.2% have planned for health and exercise and 46.2% have planned a change of residence.

5-Which of the following documents have you signed?

84.5% of you have signed a will, 50.8% have signed a directive to physicians and 44.3% have signed a medical power of attorney. 5% have signed none of these documents.

Again, thanks for your help in this research project,

Verne Wheelwright

### Exhibit III: Questionnaires sent to a panel of volunteers

## Life events

Questionnaire:

Just a few ground rules:

- 1-The answers you provide are entirely confidential. All data will be used collectively and no individuals will be named or otherwise identified.
- 2-Please answer only for yourself. If your spouse wishes to participate and did not receive a questionnaire, please call me at 423-5758 and I'll send another one.
- 3-If you have e-mail, and could respond to future questionnaires via email, please fill in your email address here:

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The first few questions ask for your age at different times in your life. If you did not do this activity, please write the word "Not".

At what age did you:

- 1-Begin your financial planning for retirement? \_\_\_\_\_
- 2-Begin planning what you would do after retirement (travel, golf, work, etc.)? \_\_\_\_\_
- 3-Decide where you would live after retirement (even if your decision was to stay in the same place)? \_\_\_\_\_
- 4-Prepare your first will? \_\_\_\_\_ Your most recent will? \_\_\_\_\_
- 5-Prepare and sign a directive to physicians? \_\_\_\_\_

Who helped you plan for retirement? (Mark all that apply)

- 6- ☐ Accountant
- 7- ☐ Attorney
- 8- ☐ Financial advisor
- 9- ☐ Seminar(s)
- 10- ☐ Child(ren)
- 11- ☐ Employer
- 12- ☐ Parents
- 13- ☐ Did the research and planning myself or with spouse
- 14- ☐ Did not plan
- 15- ☐ Other

---

16-What could you have planned better? \_\_\_\_\_



17-What events have changed your plans for or during retirement? \_\_\_\_\_  
\_\_\_\_\_

18-What types of information would have helped you prepare better for your retirement?  
\_\_\_\_\_  
\_\_\_\_\_

19-In which areas have you made plans for your life beyond today? (Mark all that apply)

- ☐ Financial, insurance -  
Comments \_\_\_\_\_
- ☐ Activities, travel, hobbies -  
Comments \_\_\_\_\_
- ☐ Health, long term care -  
Comments \_\_\_\_\_
- ☐ Housing (future moves) –  
Comments \_\_\_\_\_
- ☐ Family and friends -  
Comments \_\_\_\_\_
- ☐ Transportation when you can't drive -  
Comments \_\_\_\_\_

20-How many family members live with you or within 50 miles of your present home? \_\_\_\_\_

21-Since age sixty, have you provided assistance for any of your children or grandchildren?

- ☐ Yes - What kinds of assistance? \_\_\_\_\_
- ☐ No

22-Do you expect children or grandchildren to assist you or help care for you if you become unable to care for yourself?

- ☐ Yes
- ☐ No
- Comments \_\_\_\_\_

23-What important events have happened since age sixty for which you were not well prepared? \_\_\_\_\_  
\_\_\_\_\_

24-What important events have happened since age sixty that you were well prepared for?  
\_\_\_\_\_  
\_\_\_\_\_

25-Please select one answer that describes your feelings about your future:

- ☐ I don't want to know about the future. I'll take what comes.  
☐ Knowing about life stages or likely events is not of value to me.  
☐ Understanding life stages or likely events would be helpful to me.  
☐ Knowledge of life stages and likely events is very important to me. I want to be as prepared as possible.

What is your:

26-Year of birth? \_\_\_\_\_

27-Marital status (circle one) Married- Divorced – Widow(er)- Never married

28-Sex (circle one) Female - Male

(Feel free to add comments on the back or on additional pages)

This survey was sent to 49 members of Seniors' Choice who had responded to earlier surveys and had volunteered to take trial surveys and participate in focus groups. Thirty responses were received.

The first question on this survey asked respondents to indicate the age at which they made specific decisions or took certain actions.

Survey question: At what age did you:

<b>Response</b>	<b>Age Range</b>	<b>Mean Age</b>	<b>Median Age</b>	<b>Mode Age</b>	<b>No answer</b>
Begin your financial planning for retirement?	20 to 62	47	50	50	5 (16.7%)
Begin planning what you would do after retirement (travel, golf, work, etc)?	35 to 70	53	54	50	11 (36.7%)
Decide where you would live after retirement (even if you decided to stay in the same place)?	40 to 73	57	58	60	7 (23.3%)
Prepare your first will?	25 to 74	46	45	65	2 (6.7%)
Your most recent will?	50 to 79	66	68	70	2 (6.7%)
Prepare and sign a directive to physicians?	45 to 82	64	64	63	12 (40.0%)

These responses indicate that half of the respondents did not begin financial planning for retirement until age fifty or later, Half began planning retirement activities after age 54 and half did not plan for a retirement home until after age 58.

Survey question: Who helped you plan for retirement? (Mark all that apply)

<b>Response</b>	<b>Respondents</b>	<b>Percent (n=30)</b>
Accountant	3	10.0
Attorney	9	30.0
Financial advisor	12	40.0
Seminar(s)	8	26.6
Child(ren)	2	6.7
Employer	5	16.7
Parents	1	3.3
Did the research and planning myself or with spouse	24	80
Did not plan	3	10.0
Other	4	13.2

The majority (80%) of these respondents state that they were directly involved in their own retirement planning. At the same time, many sought professional help from attorneys (30%), financial advisors (40%), seminars (26.6%) and others (36.7%). The sum of the percentages exceeds 100% because some persons received help or advice from more than one source.

Survey question: What could you have planned better?

<b>Response</b>	<b>Respondents</b>	<b>Percent (n=30)</b>
Nothing	7	23.3
Start earlier	3	10.0
Financial	10	30.0
Medical	2	6.7
Death of spouse	1	3.3

Self ahead of others	2	6.7
Housing	1	3.3
No answer	4	13.3

Twenty-three percent of respondents indicated that they could think of nothing they could have done better in planning for their retirement. At the same time, thirty percent felt they could have done better with their financial planning. A typical comment in this group was “should have begun investing earlier.”

Survey question: What events have changed your plans during retirement?

Responses	Respondents	Percent (n=30)
Health events – self or spouse	6	20.0
Death of spouse and other family	4	13.3
Moved to Rio Grande Valley	5	16.7
Financial events or problems	6	20.0
Family	1	3.3
No events	5	16.7
No answer	3	10.0

This open-ended question asked about events that caused changes in respondent’s retirement plans. The responses were varied and in some cases unexpected (“nephew cheated me of money”). Some respondents wrote very long answers. The open ended questions in this small survey required considerably more effort than multiple choice or scaled questions, but revealed information that had not been considered. As a result, two open-ended questions about life events were included on the Systematic survey. In addition to the additional time required to categorize and enter the responses from open-ended questions, there was a risk that people would not respond as well in a larger survey as they did in this survey of volunteers.

Survey question: What types of information would have helped you prepare better for your retirement?

Responses	Respondents	Percent (n=30)
Financial	8	26.6
Religion	1	3.3
Family	1	3.3

Information (unspecified)	2	6.6
None or don't know	8	26.6
No answer	10	33.3

This question apparently gave respondents trouble, as answers were unclear and formed no patterns, although it is clear that at least some respondents (26.6%) would have preferred to have more financial information.

*Survey question:* In which areas have you made plans for life beyond today? (Mark all that apply)

Responses	Respondents	Percent (n=30)
Financial, insurance	18	60.0
Activities, travel, hobbies	18	60.0
Health, long term care	16	53.3
Housing (future moves)	9	30.0
Family and friends	11	36.7
Transportation when you can't drive	7	23.3

More than half of these respondents, median age 78, indicated that they have made plans for the future for their finances, activities and health-care. Several people mentioned long- term-care insurance and others mentioned plans to move to a continuing care facility.

*Survey question:* How many family members live with you or within 50 miles of your present home?

Range	Mean	Median	Mode	No answer
0 to 16	2	1	1	0

These results suggest that half of the respondents have either one family member (including spouse) or no family members living within 50 miles. This may be more common in retirement areas like the Rio Grande Valley than in metropolitan areas where retirees live closer to their families. Low phone rates and e-mail may make retirees comfortable with the distance from families. One respondent remarked, "We have a close relationship with our family via e-mail, telephone and visits..."

*Survey question and results:* Since age sixty, have you provided assistance for any of your children or grandchildren?

	Respondents	Percent (n= 29)
--	-------------	-----------------

Yes	20	69
No	9	31
No Answer	1	

Respondents (69%) indicated that they had provided “financial, spiritual and emotional” support, including “college tuition”, “child care” and a “large ranch.” Some grandparents are raising their grandchildren.

*Survey question and results:* Do you expect children or grandchildren to assist you or help care for you if you become unable to care for yourself?

	Respondents	Percent (n= 29)
Yes	6	
No	23	
No Answer	1	

Though generous with their children and grandchildren, few respondents (20.7%) expect assistance or care from their children or grandchildren. This may be because the individual has “provided for all contingencies” or because the children have already said “don’t expect us to take care of you.”

*Survey question:* What important events have occurred since age sixty for which you were not well prepared?

Responses	Respondents	Percent of respondents (n=30)
Health events – self or spouse	9	30.0
Death of spouse and other family	8	26.7
Financial events or problems	6	20.0
No events	4	13.3
No answer	3	10.0

Health events, death (including spouse) and financial events, broad, high impact categories, comprised events for which respondents were not prepared. These were among the events listed among “worst events” in the Systematic survey and all rank as high stress events in the Holmes-Rahe scale (1967).

*Survey question:* What important events have occurred since age sixty for which you were well prepared?

Response	Respondents	Percent of respondents (n=30)
Health events – self or spouse	3	10.0

Death of spouse and other family	1	3.3
Financial	7	23.3
Housing	6	20.0
Retirement	5	16.7
Travel	3	10.0
Retirement	3	10.0
Religion	2	6.7
No events	4	13.3
No answer	5	16.7
<i>Total responses</i>	39	NA

Survey question: Please select one answer that best describes your feelings about your future:

<b>Response</b>	<b>Respondents</b>	<b>Percent of respondents (n=30)</b>
I don't want to know about the future. I'll take what comes.	7	23.3
Knowing about life stages or likely events is not of value to me	1	3.3
Understanding life stages or likely events would be helpful to me	6	20.0
Knowledge of life stages and likely events is very important to me. I want to be as prepared as possible.	13	43.3
No answer	3	10.0

A majority of respondents to this survey (63.3%) indicated a favorable disposition toward some type of planning for the future. This question was changed slightly and included in the Systematic survey.

### Demographics

<b>Age</b>	<b>Panel I Respondents</b>	<b>Statistical sample</b>
Range	63 to 89	61 to 94
Mean age	74	76
Median age	75	78
Mode age	66	80

<b>Marital status</b>	<b>Panel I</b>	<b>Percent</b>	<b>Statistical sample</b>
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	<b>Respondents</b>	<b>n=30</b>	
Married	18	60.0	64.1%
Divorced	2	6.7	5.4
Widow(er)	9	30.0	28.3
Never married	1	3.3	2.2

#### **Exhibit IV: Trial Survey- Health**

1-Do you consider your health to be

☐ Excellent

☐ Good

☐ Fair

☐ Poor

Comments \_\_\_\_\_

2-What do you do regularly to improve or maintain your health and fitness? (Mark all that apply)

☐ Exercise

☐ Pneumonia shots

☐ Nutritious diet

☐ Wear sunglasses

☐ Regular medical checkups

☐ Wear sun-block

☐ Flu shots

☐ Take vitamins or supplements

Comments \_\_\_\_\_

3- How many prescription drugs (pills, inhalants, shots, etc) do you take or use daily?

\_\_\_\_\_

Comments \_\_\_\_\_

4- Do you have insurance that pays for prescription drugs?

☐ Yes

☐ No

<b>Sex</b>	<b>Panel I Respondents</b>	<b>Percent (n=30)</b>	<b>Statistical sample</b>
Female	18	60	66%
Male	10	33.3	34%
No response	2	6.7	

Comments \_\_\_\_\_

5-For your prescription drugs not covered by insurance, how many do you buy in Mexico? (Mark here if all your drugs are covered by insurance \_\_\_\_\_)

☐ None

☐ Some

☐ All

Comments \_\_\_\_\_

6- How many hours of exercise do you get in the average week? \_\_\_\_\_

Comments \_\_\_\_\_

7- How many hours per week in each category of exercise?

☐ Aerobic (Including walking, swimming, bicycling, etc.)

☐ Stretching (Exercises, Tai Chi, Yoga, etc.)

☐ Resistance (weights and machines)

Comments \_\_\_\_\_

8-For how many years since age sixty have you been exercising regularly? \_\_\_\_\_

Comments \_\_\_\_\_



9-How many different doctors (general practitioner, specialist, dentist, etc.) do you normally visit in one calendar year? \_\_\_\_\_

Comments \_\_\_\_\_

What is your:

10-Year of birth? \_\_\_\_\_

11-Marital status (circle one) Married- Divorced – Widow(er)- Never married

12-Sex (circle one) Female - Male

Please add comments or suggestions on the back, and thanks for the help!

This trial survey was concerned with health issues. Forty-four questionnaires were mailed or e-mailed and 32 responses were received.

Survey question: Do you consider your health to be:

Response	Respondents	Percent (n=32)
Excellent	8	25.0
Good	15	46.9
Fair	8	25.0
Poor	1	3.1

Several respondents added comments, including a 77 year old widow who stated “I feel so well it’s scary” and an man who had indicated good health ”that’s for 83 years old/ would not hold up @ 35/50).”

Survey question: What do you do regularly to improve or maintain your health and fitness? (Mark all that apply)

Response	Respondents	Percent (n=32)	Percent “Do not”
Exercise	26	81.3	18.8
Nutritious diet	23	71.8	28.2
Regular medical checkups	26	81.3	18.8
Flu shots	21	65.6	34.4
Pneumonia shots	14	43.8	56.2
Wear sunglasses	20	62.5	37.5
Wear sun-block	12	37.5	62.5
Take vitamins or supplements	26	81.3	18.8

A high percentage (81.3%) of these respondents exercise, have regular medical checkups and take vitamins or supplements. Fewer people (71.8%) feel they have a nutritious diet, but some of the most notable numbers here are in the column labeled “Do not.” For example pneumonia was the cause of death of 55,786 persons over age 65 in the U.S. in 1999 (CDC, 1999), and influenza was the cause of death for 1,496 in the same age group that year, 90% of all influenza deaths in the U.S. in 1999. Although flu and pneumonia immunizations are provided at no cost to Seniors’ Choice members, these numbers suggest that a substantial percentage of members do not bother themselves with the vaccinations.

*Survey question:* How many prescription drugs (pills, inhalants, shots, etc.) do you take or use daily?

Range	Mean (n=32)	Median (n=32)	Mode	None	No answer
1 to 11	4.6	5	1-2-3 (Multi-modal)	4	0

One individual (3.1%) was taking eleven medications regularly and four (12.5%) people were taking none at the time of this survey.

*Survey question and response:* Do you have insurance that pays for prescription drugs?

	Respondents	Percent (n=32)
Yes	19	59.4
No	12	37.5
No Answer	1	3.1

This response included a higher number of people with insurance coverage for prescription drugs (59.4%) than expected. Since Medicare, the U.S. health care plan for people over 65, does not pay for prescription drugs, some of the respondents may receive coverage from a former employer or through insurance they have purchased to fill gaps in coverage.

*Survey question and response:* For your prescription drugs not covered by insurance, how many do you buy in Mexico?

	Respondents	Percent (n=32)
All	2	6.2
Some	8	25.0
None	15	46.9
Insured	7	21.9

Harlingen is located a few miles from the U.S border with Mexico. Many prescription drugs are much less expensive in Mexico than in the United States and a large number of people cross the border to purchase prescription drugs. For example, a one-month supply of Tamoxifen, a hormone for women suffering from breast cancer, costs \$100.00 in the U.S. and \$10.00 for the same quantity in Mexico. Similarly, a one-month supply of Proscar, a medication for men with enlarged prostate, costs \$89.00 in the U.S. and \$49.00 in Mexico. Medicare, the U.S government health insurance for most people over age 65 does not pay for prescription drugs, so the cost of prescription drugs is an important aging issue in the United States. For an older person taking 4 or 5 prescriptions per month, with no insurance for prescriptions, the savings from buying outside the U.S. can be substantial. Recently, low cost prescription drugs have become available from Canada via the Internet.

Survey question: How many hours of exercise do you get in the average week?

Range	Mean	Median	Mode	None	No answer
1.5 to 10.0 hrs.	4.73 hrs. (n=28)	3.75 hrs. (n=28)	3.0 hrs	3	1

Twenty-eight respondents (87.5%) claimed participation in some form of exercise during their average week. Three persons (9.4%) acknowledged no exercise and one person failed to respond. Some respondents added comments including, “plus house and yard work” and “plus 18 holes golf 2 to 4 times per week”

Survey question: How many hours per week do you engage in each category of exercise?

***Aerobic exercise-***Including walking, swimming, bicycling etc.

Range	Mean	Median	Mode	None (respondents)	No answer (respondents)
1.5 to 10.0 hrs	3.75 hrs	3.0 hrs	3.0 hrs	4	0

Clearly the most popular category, twenty-eight respondents (87.5%) participate in some form of aerobic exercise, and half of that group (28) exercises 3.0 hours per week. This may represent the one-half-hour of walking per day that is often recommended for older people in popular publications. Four respondents (12.5%) acknowledge no aerobic exercise.

***Stretching exercises- Tai Chi, Yoga***

Range	Mean (n=6)	Median (n=6)	Mode	None (respondents)	No answer (respondents)
0 to 2.0 hrs	1.4 hrs	1.5 hrs	2.0 hrs	26	0

Six respondents indicated participation in some form of stretching exercise. Among these six, the median was 1.5 hours of stretching exercise per week.

***Resistance exercise-***Weights and machines

Range	Mean (n=5)	Median (n=5)	Mode	None (respondents)	No answer (respondents)
.5 to 2.0	1.4 hrs	1.5 hrs	2.0 hrs	27	0

Only five respondents indicated that they are lifting weights or using machines that provide resistance exercise. For these five people, the median exercise time is 1.5 hours per week.

Survey question: For how many years since age sixty have you been exercising regularly?

<b>Range</b>	<b>Mean (n=26)</b>	<b>Median (n=26)</b>	<b>Mode</b>	<b>None (respondents)</b>	<b>No answer (respondents)</b>
1 to 28 yrs	11.8 yrs.	13.5 yrs.	5.0, 15.0 yrs. (bimodal)	4	2

Of the 26 people who exercise regularly, half have been exercising for over 13 years. Some people stated they had been exercising regularly all their lives. There is an apparent discrepancy between the responses to this question and the earlier question “*How many hours of exercise do you get in the average week?*” in which 28 people indicated they exercised weekly. Two people included house or yard work as exercise in the first question, but wrote “None” for the final question on exercise.

Survey question: How many different doctors (general practitioner, specialist, dentist, etc.) do you normally visit in a calendar year?

<b>Range</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>None (respondents)</b>	<b>No answer (respondents)</b>
0-6	3	3	2	1	1

One person did not normally visit any doctors and one person normally visits six different doctors in a year. For a number of reasons, older people tend to visit doctors more often than younger people (Jagger et al., 2002), and when they visit multiple doctors, a risk can arise of interactions between multiple prescriptions, or poly-pharmacy. This response suggests that half of the respondents see three or more different doctors in one year. For some people, this could be a general practitioner, a dentist and an optician or ophthalmologist, which would seem reasonable. If the individual were to see three different medical specialists in a year, there might be reason for closer investigation.

The concern about poly-pharmacy is that it can be part of a positive feedback system, where, for example, a patient has behavioral side effects from one medication, so is prescribed another medication to deal with the side effects, starting a system of treating side effects. This is compounded when multiple physicians are involved, suggesting the importance of having a concerned person besides the patient aware of treatments, medications and the effect of those medications.

Demographic questions and results:

*What is your: Year of birth*

<b>Range</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>None</b>	<b>No answer</b>
1913-1939 Ages 63 to 89	1928 Age 74	1927 Age 73	1926,1936 (bimodal)	0	0

**Marital status**

Married	20	62.5%
Divorced	2	6.3%

Widow(er)	9	28.1%
Never married	1	3.1%

#### Sex

Female	20	62.5%
Male	12	37.5%

The trial surveys were very important for testing the mechanics of conducting surveys of Seniors' Choice members and for the development of questions for the systematic survey. They were also useful in obtaining general information about aging and life after age sixty.

In this final survey, life stages had taken shape as a core category, so there were specific questions that tried to determine if the research was on the right track in that area.

In January 2002, a questionnaire was mailed to all members of Senior's Choice, as required by the administration, but members selected systematically in a random start received stamped and addressed reply envelopes. The replies that were returned in those envelopes are tabulated and analyzed in Chapter 4.0. The replies that were returned in other envelopes supplied by the respondents were tabulated separately and the results are shown here as the "Parallel" survey. Following is the questionnaire for both surveys.

## Exhibit V: Systematic Survey Questionnaire and Parallel Survey Results

# Research Survey 2002

The following survey is part of a doctoral research project being conducted among Seniors' Choice members by Verne Wheelwright. The first survey was conducted in January 2001. Verne reported results in the next newsletter and in a presentation to members at the July 2001 meeting. Since then he has conducted several small surveys of Seniors' Choice volunteers. All information received in this and other surveys will be treated confidentially and no individual information will be released. If you have any questions about the survey, please call Verne at 423-5758 or send an e-mail to [vwheelwright@yahoo.com](mailto:vwheelwright@yahoo.com). Participation in this survey is entirely voluntary.

In order to collect a statistically accurate sample, some of you will receive stamped and addressed envelopes with this mailing. If you receive one of these envelopes, your response will represent many other people in the statistical sampling, so your reply is valuable. If you did not receive the reply envelope, your response is still very valuable and will be used. **You may mail the completed form to Verne Wheelwright, 1917 Guava Circle, Harlingen, TX 78552 or return it to the Seniors Choice office.**

Please feel free to add comments or suggestions. Extra pages are encouraged. Every word will be read!

**1- Retirement life has been portrayed by writers in a variety of ways ranging from loneliness and boredom to frenzied activity. How have you found your**

**life to be since retirement? (Mark all that apply):**

- a\_\_ Lonely
- b\_\_ Boring
- c\_\_ A good balance between activities and time to myself
- d\_\_ Mostly a very good time of life
- e\_\_ Mostly a very difficult time of life
- f\_\_ Busier than ever before
- g\_\_ Happier than ever before
- h\_\_ Pretty much like life has always been
- i\_\_ Life is less complicated

**Comments** \_\_\_\_\_

**2-Since age sixty, what are the best events that have happened in your life?**

\_\_\_\_\_

**3-Since age sixty, what are the worst events that have happened in your life?**

\_\_\_\_\_

4- If you become unable to care for yourself, which options do you expect to use? (Mark with number 1 for first choice, 2 for second, etc.)

a\_\_ Receive care in my present home

b\_\_ Move to a child's home

c\_\_ Move to a friend's home

d\_\_ Move to assisted living

e\_\_ Move to a nursing home

Other\_\_\_\_\_

(More on the other side)

5-If you choose to be cared for at home, who would provide the care?  
(Mark with number 1 for first choice, 2 for second, etc.)

a\_\_ Spouse

b\_\_ Child

c\_\_ Grandchild

d\_\_ Friend

e\_\_ Hired help or a professional caregiver

f\_\_ Will not be cared for at home

Other\_\_\_\_\_

6-My research to date suggests that there are four stages in life after age sixty. They are not related to chronological age, they are sequential, but a stage may be skipped and sometimes reversed, returning to an earlier stage. Briefly, they are:

**Independent Stage-** Able to manage and enjoy most aspects of life.

**Vulnerable Stage-** Difficulty handling some parts of life. May have multiple

chronic illnesses and multiple medications.

**Dependent Stage-** No longer able to handle everything. Need help with some daily activities such as bathing, eating, using the toilet, etc.

**End of Life Stage-** Terminal diagnosis or terminal stage of an illness.

Based on your experiences and observations of those around you, do these descriptions of life stages:

a\_\_ Represent life after 60 accurately

b\_\_ Seem OK

c\_\_ Don't really represent realities of life after 60

d\_\_ Don't make any sense at all

Comments\_\_\_\_\_

7-Please select one answer that describes your feelings about your future:

a\_\_ I don't want to know about the future. I'll take life as it comes.

b\_\_ Knowing about life stages or future events is not of value to me.

c\_\_ Understanding life stages or future events would be helpful to me.

d\_\_ Knowledge of life stages or future events is very important to me.

What is your:

**Education** – Mark the highest level completed-

\_\_Grade school \_\_High school \_\_Some College \_\_Batchelor's degree  
\_\_ Master's degree \_\_ Doctoral degree \_\_Other

**Year of Birth:** \_\_\_\_\_

**Marital status:** ☐ Married ☐ Divorced ☐ Widower ☐ Never married

**Sex :** ☐ Female ☐ Male

Thank you for taking the time to answer these questions. It's a big help. Please mail the completed form to Verne Wheelwright, 1917 Guava Circle, Harlingen, TX 78552 or return it to the Seniors Choice office.

### **Parallel survey of Seniors' Choice members**

Concurrent with the systematic survey, each member of Seniors' Choice who did not receive a prepaid reply envelope received a questionnaire that was identical to those in the selected sample. These members were invited to return the completed questionnaires to the Seniors' Choice office or to mail them at their own expense. Because this arrangement invites self- selection, these responses were kept separate from those of the systematic sample, yet these responses represented life experiences of 221 people above age sixty, and for that reason the data from those responses is included here.

#### Survey question:

My research to date suggests that there are four stages in life after age sixty. They are not related to chronological age, they are sequential, but a stage may be skipped and sometimes reversed, returning to an earlier stage.

Briefly, they are:

Independent Stage- Able to manage and enjoy most aspects of life.

Vulnerable Stage- Difficulty handling some parts of life. May have multiple chronic illnesses and multiple medications.

Dependent Stage- No longer able to handle everything. Need help with some daily activities such as bathing, eating, using the toilet, etc.

End of Life Stage- Terminal diagnosis or terminal stage of an illness.

### **Results and comparison to the systematic sample**

<b>Responses</b>	<b>Respondents</b>	<b>Percent (n=221)</b>	<b>Systematic Survey (n=186)</b>
Represent life after 60 accurately	114	51.6	46.2%
Seem OK	71	32.1	37.1%
Don't really represent realities of life after 60	18	8.1	8.1%
Don't make any sense at all	5	2.3	.5%
No reply	13	5.9	8.1%

When the data for the parallel survey and the systematic survey are compared, the response from the parallel survey to the first answer is 5.4% higher than that of the systematic survey. Responses for the second answer are 5% lower for the parallel survey. The result is that when the scores for the two positive responses are added



together, the scores for the two surveys are nearly identical, with the parallel survey totaling an 83.7% positive response and the systematic survey totaling an 83.3% response.

*Survey question:* Since age sixty, what are the best events that have happened in your life?

### Results and comparison

Response	Respondents	Percent (n=221)	Percent Statistical Sample
Travel	87	39.4%	25.3%
Retirement	22	10.0	18.8
Coming to the Rio Grande Valley	27	12.2	17.7
Family or friends	23	10.4	15.1
Discretionary time	34	15.4	14.5
Grandchildren	31	14.0	13.4
Marriage or remarriage	12	5.4	7.0
Other activities	11	5.0	4.8
Fiftieth anniversary	12	5.4	3.8
Good health	10	4.5	3.8
Still alive	3	1.4	3.2
Hobbies and sports	13	5.9	3.2
Work	9	4.1	3.2
Religion	1	0.5	2.7
Social activities	22	10.0	NA
No answers	22	10.0	10.8
No important events	0	0	3.2

This table compares the results of the Parallel Survey with the Statistical sample. The largest differences occur in three categories: Travel (14.1% difference), Retirement (8.8% difference) and Social events (Not included in the Statistical sample).

*Survey question:* Since age sixty, what are the worst events that have happened in your life?

### Results and comparison

Response	Respondents	Percent (n=221)	Percent Statistical Sample
Respondent's illness	70	31.7	29.6%
Death of a spouse	47	21.3	21.5
Deaths of family and friends	52	23.5	19.9
Spouse's illness	17	7.7	9.7
Other problems	2	.9	5.4
World events (9/11)	6	2.7	4.3
Family problems	6	2.7	4.3
Financial problems	9	4.1	2.2

Being a caregiver	2	.9	1.1
Divorce	3	1.4	.5
Loneliness	0	0.0	.5
No bad events	17	7.7	5.9
No answer	22	10.0	8.1

Total responses 231  
(Not including non-responses)

In these two questions dealing with “best” events and “worst” events, there is a remarkable similarity in the responses of the two groups to these two open-ended questions. When the parallel survey was tallied, there had been a lapse of about three months since the scoring of the systematic survey. During the scoring for the parallel survey, a category “Social activities” was added because some responses did not appear to fit any other categories. If that category had not been added, some responses that were eventually scored into the new category might otherwise have gone to other categories.

Survey question:

If you become unable to care for yourself, which options do you expect to use?

**Results and comparison**

**Parallel survey**

	<b>First</b>	<b>Second</b>	<b>Third</b>	<b>Fourth</b>	<b>Fifth</b>	<b><u>Not a choice</u></b>
Receive care at home	67%	4%	1%	1%	0%	27%
Move to a child's home	3%	7%	2%	8%	1%	79%
Move to a friend's home	0%	1%	1%	1%	7%	90%
Move to assisted living	26%	46%	3%	0%	0%	25%
Move to a nursing home	2%	9%	24%	2%	1%	62%
No choice entered	3%	33%	69%	88%	91%	

The chart below shows combined responses of 407 people over age sixty who responded to either the systematic survey or the parallel poll. Percentages shown represent the sum of the responses in each category converted to a percentage.

**Combined results (n=407)**

	<b>First</b>	<b>Second</b>	<b>Third</b>	<b>Fourth</b>	<b>Fifth</b>	<b><u>Not a choice</u></b>
Receive care at home	66%	3%	1%	0%	0%	30%

Move to a child's home	3%	7%	2%	6%	1%	81%
Move to a friend's home	0%	1%	1%	2%	6%	90%
Move to assisted living	27%	44%	3%	0%	0%	26%
Move to a nursing home	3%	12%	26%	2%	1%	56%
No choice entered	1%	33%	67%	90%	92%	

When the results of the statistical sample and the parallel survey are combined, the resulting table reflects the similarity between the results of the two surveys. Again, the responses are concentrated in the first choice with the number of non-responses increasing with each additional choice. Here also, the final column is important in that it stresses the choices that are least desirable.

Survey question:

*If you choose to be cared for at home, who would provide the care?*

**Parallel Survey**

	<b>First choice</b>	<b>Second choice</b>	<b>Third choice</b>	<b>Fourth choice</b>	<b>Fifth choice</b>	<b>Sixth choice</b>	<b>Not a choice</b>
Spouse	45%	5%	1%	0%	0%	0%	49%
Child	8%	11%	3%	2%	1%	0%	75%
Grandchild	0%	2%	1%	1%	2%	0%	95%
Friend	2%	5%	3%	1%	1%	2%	86%
Professional	36%	27%	4%	0%	0%	0%	33%
No care at home	7%	6%	2%	1%	0%	1%	83%
No response	2%	44%	87%	94%	96%	97%	

The results for this question are similar to those in the Statistical Survey. The chart below shows combined responses of 407 people over age sixty who responded to either the systematic survey or the parallel poll. Percentages shown represent the sum of the responses in each category converted to a percentage.

**Combined results**

<b>(n=407)</b>	<b>First choice</b>	<b>Second choice</b>	<b>Third choice</b>	<b>Fourth choice</b>	<b>Fifth choice</b>	<b>Sixth choice</b>	<b>Not a choice</b>
Spouse	44.5	4.2	0.2	0.0	0.0	0.0	51.1%
Child	7.9	10.1	4.4	1.0	0.2	0.0	76.4%
Grandchild	0.2	1.0	1.5	1.7	1.0	0.0	93.6%
Friend	1.2	3.2	1.7	1.7	2.0	0.2	89.9%
Professional	33.7	31.5	3.7	0.0	1.0	0.0	31.0%
No care at home	9.1	5.2	2.0	0.7	0.0	1.0	82.1%
No response	3.4	44.8	86.5	94.9	95.8	98.8	

	100%	100%	100%	100%	100%	100%	
--	------	------	------	------	------	------	--

This table, combining the results of the two surveys, is also very similar to the results of each of the surveys. As in the previous tables, this table clearly illustrates the preferences of the respondents, i.e. they would prefer to be cared for by a spouse or a professional and would prefer not to be cared for by a grandchild or a friend.

Although these questions about care do not relate directly to the research questions, they do relate to life events, trends and choices. The results become important when developing scenarios and strategies for the future.

Survey question:

*Please select one answer that describes your feelings about the future:*

<b>Responses</b>	<b>Respondents</b>	<b>Percent (n=221)</b>	<b>Systematic Survey Percent (n=186)</b>
I don't want to know about the future. I'll take it as it comes.	93	42.1	53.2
Knowing about life stages or future events is not of value to me.	6	2.7	3.8
Understanding life stages or life events would be helpful to me.	64	29.0	23.7
Knowledge of life stages or life events is very important to me.	51	23.1	17.2
Missing	7	3.2	2.2

The responses to the parallel survey indicate a more positive attitude toward the future than those of the systematic survey. Of the respondents to the parallel survey, 52.1% expressed an interest in life stages and life events while only 40.9% of respondents to the systematic survey expressed the same interest.

Reflecting on the wording of the four elements of this question reveals that several factors dilute its value. First, the wording mentioned earlier "I'll take it as it comes" is almost a challenge to the respondent to be courageous. Second, there is a disconnect between the wording in the first two parts of the question when compared to the second two parts. These four elements could be better worded to represent a scaling of interest in understanding personal futures, and that opportunity was missed.

This reflection provides an opportunity to comment on one of the valuable lessons of these surveys, and that is that a researcher has only limited opportunities to reach respondents. When an opportunity to engage a respondent has passed, and a portion of that opportunity wasted, it cannot be recovered.

Survey question:

*Retirement life has been portrayed by writers in a variety of ways ranging from loneliness and boredom to frenzied activity. How have you found your life to be since retirement?*

<b>Find life since retirement...</b>	<b>Responses</b>	<b>Percent (n=221)</b>	<b>Percentage of respondents</b>
Lonely	11	5.0	7%
Boring	5	2.3	3.2
Good balance, activities and time for myself	140	63.4	65.1
Very good time of life	143	64.7	64.5
Mostly a difficult time of life	11	5.0	3.8
Busier than ever	70	31.7	29.6
Happier than ever	58	26.2	24.2
Much like always	57	25.8	18.3
Less complicated	59	26.7	28.5

**Total responses** 543

**Mean number of responses**

**Per respondent** 2.51

Results for this question are very similar to the responses to the Systematic Survey. There is a difference of 7.5 percentage points between the survey responses to “Much like always” but other differences are less than 3 percent.

<b>Age</b>	<b>Parallel Survey</b>	<b>Systematic Survey</b>
Range	60 92	61 to 94
Mean age	75	76
Median age	76	78
Mode age	74	80

<b>Sex</b>	<b>Respondents</b>	<b>Percent (n=217)</b>	<b>U.S. population over 65</b>	<b>Systematic Survey Percent</b>
Female	141	65	59%	66
Male	76	35	41%	34
No response	4	-	-	-

The ratio of women to men in the Parallel group is almost identical to that of the Systematic group, with variations of only 1% in each case.

Marital status	Respondents	Percent (n=220)	U.S. population over age 65	Systematic Survey Percent
Married	148	67.3	56.6%	64.1
Divorced	15	6.8	6.7%	5.4
Widow(er)	64	24.5	32.5%	28.3
Never married	3	1.4	4.3%	2.2
No response	1	-	---	-

Marital status percentages between the two groups are quite comparable, although the Systematic group has a slightly lower percentage of married people and a correspondingly higher percentage of widows and widowers.

Education level	Respondents	Percent (n=220)	Cumulative % achieved	Systematic Survey Percent
Grade school	7	3.2	100.0	2
High school	79	35.9	96.8	33
Some college	68	30.9	60.9	40
Batchelor's degree	38	17.3	30.0	16
Master's degree	25	11.4	12.7	7
Doctoral degree	3	1.4	1.4	1
Other and no response	2	1	NA	1

The respondent education levels of the Parallel group appear very similar to those of the Systematic group, with the exception of the “Some college” category, in which the Systematic respondents are approximately 9% higher.

### **Systematic Survey- Additional results and demographic Information**

Following are additional results from the Systematic Survey discussed in Section 4.3.3.5. These results were indirect to the research and placed in this appendix to reduce the bulkiness of the survey results. Demographic information for the survey is also in this appendix.

#### **Survey questions relating to attitudes toward ageing and futures**

Some questions on the systematic survey did not relate directly to the three research questions, but asked about the respondent's attitude toward life after sixty and thinking about the future. One question asked about respondents' feelings about life after retirement and another asked about attitudes toward the future.

*Please select one answer that describes your feelings about the future:*  
**Results**

<b>Responses</b>	<b>Respondents</b>	<b>Percent (n=186)</b>
I don't want to know about the future. I'll take it as it comes.	99	53.2
Knowing about life stages or future events is not of value to me.	7	3.8
Understanding life stages or life events would be helpful to me.	44	23.7
Knowledge of life stages or life events is very important to me.	32	17.2
Missing	4	2.2

*Figure 4.16 Attitudes toward the future*

### Analysis

Fifty-seven percent of the respondents expressed no interest in their futures. Although this response is disappointing to a researcher in the field of Foresight and Futures Studies, possibly more disappointing is the realization that at least some of the response may be related to unfortunate wording of the question. The statement “I’ll take it as it comes”, referring to the future, should not have been included, as it provides both a sense of bravado and a “double barrelled” response. On the other hand, 40.9 percent of the respondents did express an interest in understanding life stages or life events.

### **Survey question:**

Retirement life has been portrayed by writers in a variety of ways ranging from loneliness and boredom to frenzied activity. How have you found your life to be since retirement?

### Results

In the order presented on the questionnaire

<b>Find life since retirement...</b>	<b>Responses</b>	<b>Percentage of respondents</b>
Lonely	13	7%
Boring	6	3.2
Good balance, activities and time for myself	121	65.1
Very good time of life	120	64.5
Mostly a difficult time of life	7	3.8
Busier than ever	55	29.6
Happier than ever	45	24.2
Much like always	34	18.3
Less complicated	53	28.5

**Total responses** **454**  
**Mean number of responses per respondent**

**2.44**

*Figure 4.17 Respondent's feelings about life after retirement*

### Analysis

Only small percentages of this sample found life after retirement lonely (7%), boring (3.2%) or mostly a difficult time (3.8%). A majority found that life after retirement was a good balance of activities and personal time (65.1%) or a very good time of life (64.5%). The fact that 29.6% indicated they were busier than ever and 24.2% that they were happier than ever suggests that a substantial portion of this sample is actively engaged in life, an important segment of the "Successful Aging" model proposed by Rowe and Kahn (1998).

Find life since retirement	Responses	Female	Male	n**	Marital status			
					Married	Divorced	Widow(er)	Never
					(n="Responses")			
Lonely	13	12 (92.3%)	1 (7.7%)	13	3 %(23)	2 (15.4)	8 (61.5)	0 (0)
Boring	6	5 (83.3%)	1 (16.7%)	6	4 %(66.7)	0 (0)	2 (33)	0 (0)
Good balance, activities and time for myself	121*	66 (61.1%)	42 (38.9%)	108	77 %(63.6)	4 (3.3)	35 (28.9)	3 (2.5)
Very good time of life	120*	71 (65.7%)	37 (34.2%)	108	77 %(64.2)	5 (4.2)	33 (27.5)	3 (2.5)
Mostly a difficult time of life	7	6 (85.7%)	1 (14.3%)	7	2 %(28.6)	1 (14.3)	4 (57.1)	0 (0)
Busier than ever	55*	33 (64.7%)	18 (35.9%)	51	39 %(70.9)	1 (1.8)	12 (21.8)	2 (3.6)
Happier than ever	45*	26	18	44	38 %(84.4)	0 (0)	4 (8.9)	2 (4.4)
Much like always	34*	23	8	31	18 %(52.9)	2 (5.9)	14 (41.2)	0 (0)
Less complicated	53*	32 (65.3%)	17	49	40 %(75.5)	1 (1.9)	11 (20.7)	1 (1.9)

*Figure 4.18 Feelings about life by gender*

\*Note – 19 respondents to the survey did not indicate their sex.

\*\* n=number of responses that can be identified as male or female

In this table, three categories stand out as varying significantly from the sample proportions of 66% female and 34% male:

Lonely

Boring

Mostly a difficult time of life



Each of these three categories consisted primarily of female respondents. One male was included in each category. Although the numbers here are too small to draw conclusions from the data, there is certainly an inference that proportionately more women than men experience loneliness or boredom or find retired life difficult. Only two persons marked all three categories, including the lone male, and a total of seventeen people (9.1% of the sample) marked at least one of the three categories.. One person marked “Boring” then added the comment ”Boring at times.” Another individual who marked “Lonely” and “Boring” commented, “Due to my husband’s ill health, retirement has been no fun.” In addition to the age variation from the sample, there was a variation in marital status, as 61.5% of those marking “Lonely” and 57.1% of those marking “Mostly a difficult time of life” were widows or widowers.

The more positive categories (Good balance, Very good time, Busier, Happier, Less complicated) tended to be predominantly married persons. In each of these positive categories 63% or more of the respondents who selected the category were married. In these categories, the percentage of married respondents from the total sample is as follows:

<b>Responses of Married persons</b>	<b>Married Respondents</b>	<b>Percent of sample (n=186)</b>
Good balance	77	41.4
Very good time of life	77	41.4
Busier than ever	39	21.0
Happier than ever	38	20.4
Less complicated	40	21.5

*Figure 4.19 Feelings of married persons about life after retirement.*

### **Happiness in later life**

Twenty-four percent of the respondents (45 people) to the survey indicated they were “Happier than ever before.” Although not directly related to the research questions, the question of happiness in later life certainly provides meaningful background for exploring personal futures and strategies, and this data is examined here in order to draw conclusions from the data for Chapter 5.

Of the 45 people who indicated that they were “Happier than ever before,” 24 (53.3%) also indicated that they were busier than ever; 36 (80%) indicated that this was a very good time of life; 32 (71%) felt that they had a good balance between activities and time to themselves; and 17 (37.8%) believed that life was less complicated. The ages of these 45 respondents ranged from 62 to 90, with a mean age of 76, a median age of 74 and the mode at age 71.

Although 66% of respondents to the systematic survey were female and 34% male, 59% (26) of those who were “Happier than ever” were female and 40.9% were male, suggesting that a slightly higher ratio of men than women are experiencing greater happiness than previously in their lives.

<b>Gender</b>	<b>Happier than ever</b>	<b>Statistical sample</b>
Female	59%	66%
Male	40.9%	34%

*Figure 4.20 Happiness in life after retirement by gender*

An initial table comparing levels of education for all respondents with levels for those indicating that they are “Happier than ever before” offers little help, but when the data is viewed differently (below),

<b>Education level completed</b>	<b>Per cent of survey (n=186)</b>	<b>Percent “happier” (n=45)</b>
Grade school	2.2	6.7
High school	33.5	26.7
Some college	40	46.7
Batchelor’s degree	15.7	13.3
Master’s degree	6.5	4.4
Doctoral degree	1.6	2.2
Other	.2	0

*Figure 4.21 Happiness in life after retirement by education level*

Some relationships appear more significant. Some of the apparent significance can be attributed to the small number of respondents in the “Grade school” and “Doctoral degree” categories, but in any case it would appear that education in itself is not an indicator of happiness in later life.

<b>Education level completed</b>	<b>Respondents in survey (n=186)</b> (Column A)	<b>Respondents who are “happier” (n=45)</b> (Column B)	<b>Percent of sample who are “happier” by education level</b> (Column B/Column A)
Grade school	4	3	75
High school	62	12	19.4
Some college	74	21	28.4
Batchelor’s degree	29	6	20.7

Master's degree	12	2	16.7
Doctoral degree	3	1	33.3
Other	1	0	0
Missing	0	0	0

*Figure 4.22- Percent of total survey respondents who are “Happier the ever” after retirement.*

Marital status appears to provide one of the stronger indicators for happiness in later life, with over 86% of the “Happier” respondents being married, a significantly higher percentage than the percentage of married in the statistical survey.

<b>Marital status</b>	<b>Per cent of survey (n=186)</b>	<b>Percent “Happier” (n=45)</b>
Married	64.1	86.4
Divorced	5.4	0
Widow(er)	28.3	9.1
Never Married	2.2	4.5

*Figure 4.23 Happiness after retirement by marital status*

A slightly different look at the data suggests that those who are divorced or whose spouse has died are less likely to be enjoying the happiest time of their lives.

<b>Marital status</b>	<b>Respondents in survey (n=186)</b>	<b>Respondents who are “happier” (n=45)</b>	<b>Percent of sample who are “Happier”</b>
Married	118	38	32.2
Divorced	10	0	0
Widow(er)	52	4	7.7
Never Married	4	2	50
Missing	2	1	

*Figure 4.24 Percent of total survey who are “Happier then ever” after retirement.*

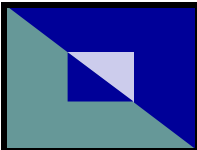
The conclusions drawn from surveys for this thesis are all based on the systematic survey with a random start. The parallel survey of the same frame is generally supportive of the numbers in the systematic survey, lending additional support to those results.



# Appendix C


## Personal Futures Workbook

Following is an example of a workbook that could be used in personal futures workshops. These workbook pages were used in a presentation to members of the World Future Society on July 30, 2005 to introduce concepts of personal futures.



### Personal Futures

Exploring and preparing for your futures



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Presentation of Personal Futures research at  
The Annual Conference of the World Future Society  
July 30, 2005  
Chicago, Illinois  
By Verne Wheelwright

# Introduction

What is a personal future? As we look at personal futures here, they are explorations of the future of one individual, but only the futures that directly involve that individual. You will be learning about the futures that relate directly to you and your family.

What should you be able to expect from studying about your future? The approach we will take consists of three steps:

1. Build a framework of information about your life.
2. From the framework information, explore your future with scenarios.
3. From the scenarios, develop a vision, strategies and action plans for your future.

You will use the same methods that have been practiced by futurists for decades all over the world. At the end of this process you should have an overview and a vision for your life, specific plans for the next stage of life, and contingency plans to deal with changes.

Following are the steps that you will learn about today and will be following in this workbook as you learn about and prepare for your future:

- Personal Research
  - Life stages
  - Personal domains
  - Life events
  - Your plans, goals and values
- Personal Scenarios
  - Develop a scenario matrix
  - Examine the forces and the logics in your life
  - Create four scenarios
- Personal Strategic Planning
  - Create a vision for your life
  - Develop strategies
  - Develop action plans
  - Develop contingency plans

And the final step.....**Live your plan!**

## Stages of life

Infant	Child	Ado-lescent	Young Adult	Adult	Mid-Age	Inde-pendent Elder	Vuln-erable Elder	Depend-ent Elder	End of Life
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**Ten stages of life.** The change period between stages is important and sometimes difficult, but preparation and understanding help. Below, the same ten life stages, with a very brief description of each stage. Note that after age sixty, the stages are no longer related to chronological age.

<b><i>Life Stage</i></b>	<b><i>Characteristics of Life Stage</i></b>
<b>Infant</b>	Birth to 2 years. Dependent, brain developing, learning motor skills and sensory abilities.
<b>Child</b>	3-9 years Growing and mastering motor skills and language. Learning to play and socialize. Continued growth, formal school and organized activities.
<b>Adolescent</b>	10-19 years. Growth spurts. Puberty brings hormonal changes and reactions. Strong emotions often rule decisions. Risks for alcohol, drugs, tobacco, etc.
<b>Young Adult</b>	20-29 years, Completing education and beginning career and family. Potential coping and financial pressures
<b>Adult</b>	30- 39 years. Managing family and career growth. Increasing numbers of couples are starting families in this stage. Continued coping pressures
<b>Middle age</b>	40-60 First signs of aging and effects of lifestyle, menopause, children are leaving the nest, grandchildren arrive, career peak. Aging parents may require care
<b>Independent Elder</b>	60 onward. More signs of aging and lifestyle effects. Eligible for Social Security, Medicare, pensions. Retirement. More discretionary time and opportunities. Travel and sports. Some health problems and medications. Caring for others
<b>Vulnerable Elder</b>	Beginning frailty, cognitive or multiple health problems. Require some assistance. Stop driving. Possible move to Assisted Living facility
<b>Dependent Elder</b>	Requires daily care. Unable to perform all personal functions. Possible move to nursing home.
<b>End of Life (Six months)</b>	Diagnosed with terminal condition or stage of disease. May require hospice care, hospitalization or nursing home care.

Which life stage are you in now? Your children? Your parents? What is the next stage? Understanding the life stages of family members helps you prepare for their changes and the resulting impacts on your life.

## Personal Domains

Personal domains are made up of the forces and sub-forces that move through your life, and in many case move you. When these forces pressure you or motivate you, they are driving forces in your life. Here, we recognize six categories of forces that are common to all people, and are a part of every person's life from birth through death.

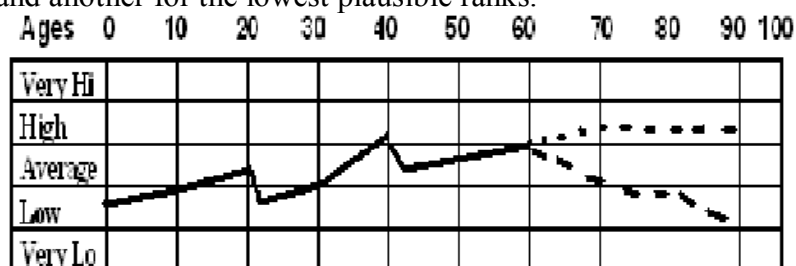
<b>Activities</b>	School, training, self-improvement, work or career, religion, sports, hobbies, travel
<b>Finances</b>	Income, expense, assets, liabilities, investments, risks, insurance
<b>Health</b>	Health status, conditions or diseases, medications, diet and exercise, medical care, personal care
<b>Housing</b>	Home, care facility, community, nation, region, climate
<b>Social</b>	Family, friends, co-workers, community, advisors, organizations, communication
<b>Transportation</b>	Mobility, personal transport, car, local public, special, long distance

The worksheets in this section will be helpful in several ways. Make some copies and keep a blank original so you can make more copies when you need them in the future.

### A few tools for evaluating forces and trends

#### Create a time series and a trend line

For each domain, use a chart like those on the next page to rank the quality of that domain in your life at each age. Make a mark in the box for each age and rank, and draw a line from the first mark to the last one. Now, project two ranks for the ages in the future stage you plan to study, one for the highest plausible ranks for that stage and another for the lowest plausible ranks.



Here's an example of a completed graph. Blank workspaces for each domain are on the next page.



*Ages      0      10      20      30      40      50      60      70      80      90*

### **Activities**

<b>Very Hi</b>										
<b>High</b>										
<b>Average</b>										
<b>Low</b>										
<b>Very Lo</b>										

### **Finances**

<b>Very Hi</b>										
<b>High</b>										
<b>Average</b>										
<b>Low</b>										
<b>Very Lo</b>										

### **Health**

<b>Very Hi</b>										
<b>High</b>										
<b>Average</b>										
<b>Low</b>										
<b>Very Lo</b>										

### **Housing**

<b>Very Hi</b>										
<b>High</b>										
<b>Average</b>										
<b>Low</b>										
<b>Very Lo</b>										

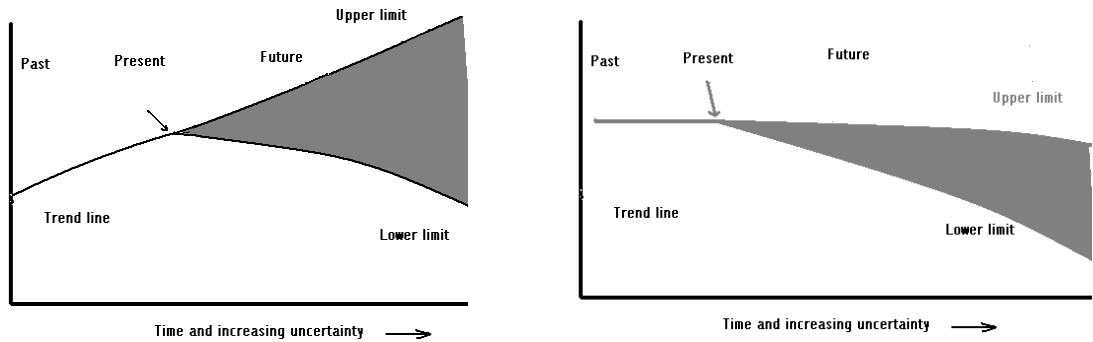
### **Social**

<b>Very Hi</b>										
<b>High</b>										
<b>Average</b>										
<b>Low</b>										
<b>Very Lo</b>										

### **Transportation**

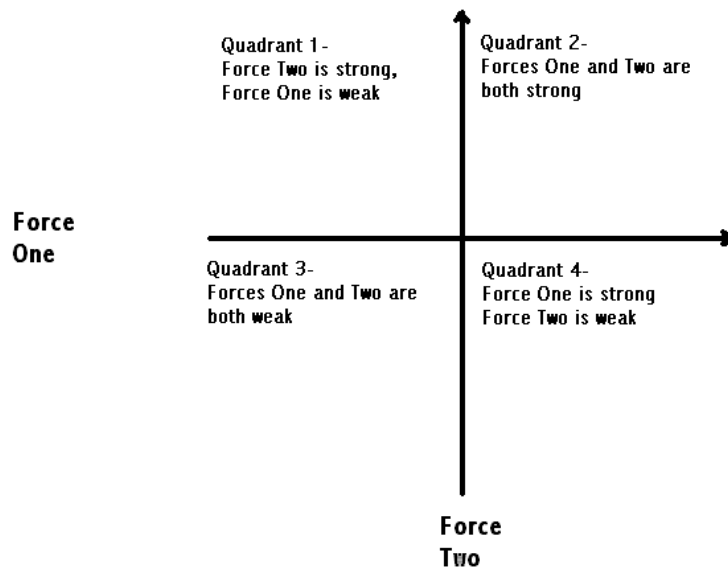
<b>Very Hi</b>										
<b>High</b>										
<b>Average</b>										
<b>Low</b>										
<b>Very Lo</b>										

The resulting extrapolation for each chart should be a cone shape that starts at the present and expands into the future. The area between the upper (optimistic) line and the lower (pessimistic) line is a zone of uncertainty, the area in which you will create your scenarios. Wild card events occur outside the zone of uncertainty. Below are two examples.



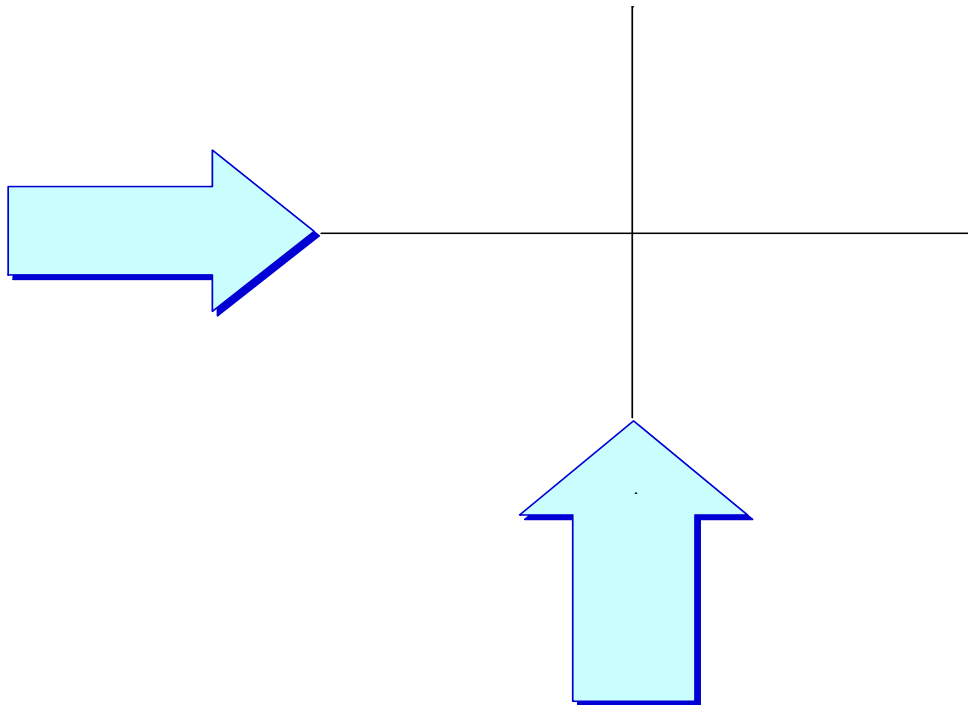
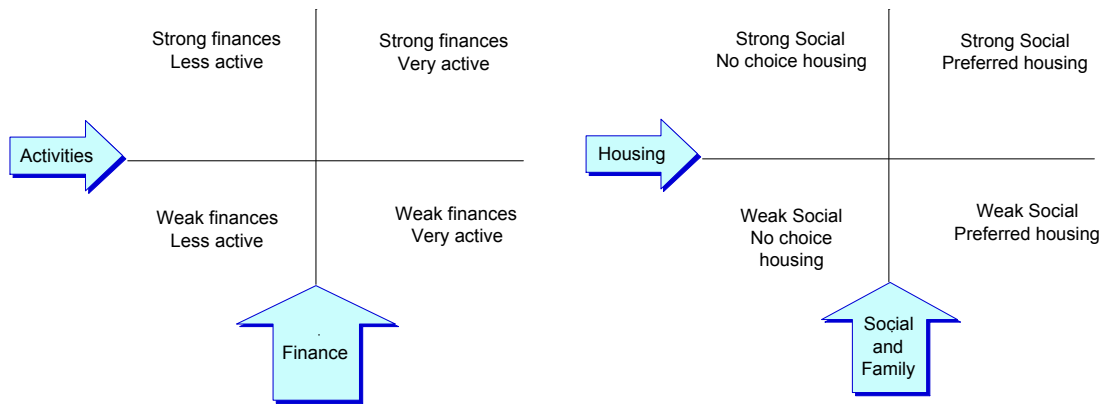
## Two-axis matrices- understanding

the quadrants



This two-axis matrix will help you analyze the effects of two life forces on your future. The arrows point from the lowest life quality of a given force to the highest quality, or from the worst plausible to the best plausible. One arrow might move from a difficult career situation to an outstanding career situation, while the intersecting arrow might represent income, finances or family life. Relate these arrows to the cones of uncertainty you created earlier. This tool can be used anywhere you have pencil and paper.

Here are two examples, followed by a blank matrix that you can use for practice.



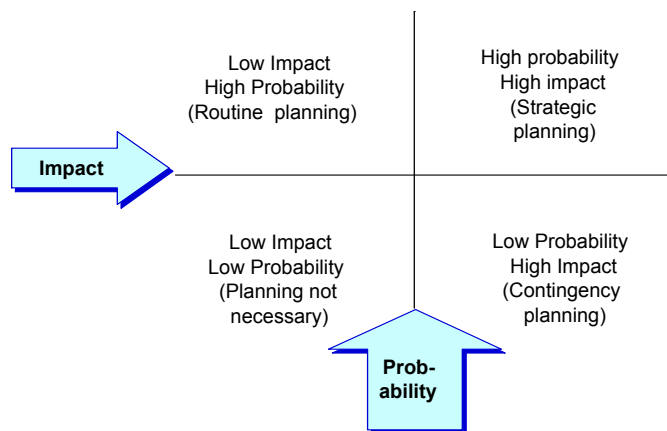
When working with the matrix, follow the arrow from the negative example to the positive example. This will always place your two most positive situations in the upper right quadrant, and the two most negative situations in the lower left.

## Life Events

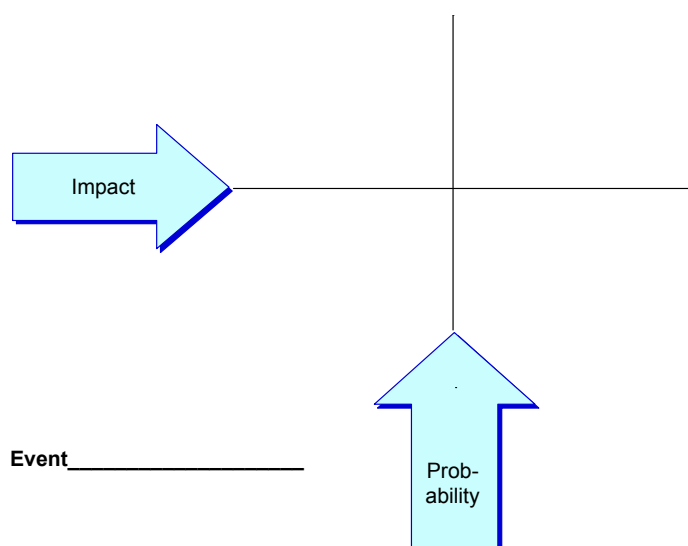
	<b>Considerations for Personal Futures</b>	<b>Examples</b>
<b>When</b>	When is the event likely to occur?	At what age or life stage? Has it already occurred?
<b>Type</b>	What type of event is this? Turning point Life cycle/biologic Legal Intentional/choice Unintentional Other	Marriage, children, divorce Growth, puberty, menopause Voting age, retirement age Marriage, children, divorce Deaths of family or friends Accident, job loss, anniversaries
<b>Impact</b>	What is the impact of the event?	Immediate? Long term? Severity?
<b>Probability</b>	What is the probability of this event occurring?	During your life? During any particular time period?
<b>Domain</b>	Within which domain does an event occur? Activities Finances Health Housing Social Transportation	Complete education, start career Save or invest for retirement Exercise to maintain health Move to a different home Birth of a child Learn to drive a car

Reading the table above, it is obvious why we look at some events as foreknowns. Based on the experiences of other people who have already experienced these events (precursor analysis), it is possible to anticipate, at least to some degree, the timing, probability and impacts of many events. When compared with life stages and personal domains, this gives us a third perspective of the future. Later, we will combine these three perspectives (stages, domains and events) into a framework that summarizes your knowledge of your futures.

### ***Impacts and probabilities of life events***



Here's another two-axis matrix. This one will help you analyze the importance of events that may occur in your life. Use this diagram to analyze specific events that may occur in your future. Also, keep this diagram in mind when you get to strategic planning



## Events that occur during various life stages

Below is a table of common events in life and the life stages in which those events are more likely to occur. This listing is intended to give you some indication of events to anticipate or prepare for at different times of life. For the most part, these events are common in the U.S. middle class, but not everywhere. Some events, first births for example, are affected by cultural patterns and socio-economic status.

### *Examples of common life events*

<b>Life Stage</b>	<b>Common</b>	<b>High impact</b>
<b>Infant</b>	Learning, walk, talk Minor illnesses	Serious illness
<b>Child</b>	School Growth Minor injuries and illnesses	Serious illness Bullying Parents divorce
<b>Adolescent</b>	School Puberty, emotions, sex Growth Begin driving Risky behaviors	Accidents, serious injuries Arrest Pregnancy Parents divorce Death of parent or friend
<b>Young adult</b>	Complete education Begin career Move out Marriage First child	Accidents Illness or injury of child Job loss
<b>Adult</b>	Career pressures- advances Managing family Last child	Financial pressures Divorce Job loss
<b>Middle age</b>	Menopause-end child bearing Aging signs Empty nest Grandchildren Parents retire Recognition for achievements Peak earnings, savings	Serious or chronic illness, self or spouse. Parent illness or death Crime victim Job loss Divorce
<b>Independent elder</b>	Eligible for retirement Social Security, Medicare Work/retirement choices Discretionary time Great grandchildren Increased aging signs Relocate, new friends Travel Problems in children's lives	Retirement Changing roles & social Serious illness, self or spouse Death of spouse Become caregiver Stop driving
<b>Vulnerable elder</b>	Frailty Cognitive problems Risk of falls Risk of scams, victim of crime	Falls, injuries Assisted living
<b>Dependent elder</b>	Reduced activities Increased medical	Dependent on others Losing control of life Nursing home
<b>End of life</b>	Reduced activities Increased medical "Good-byes"	Terminal diagnosis Hospice

## Your Personal Framework

**Life stage** \_\_\_\_\_

<b>Domain</b> Sub-forces	<b>Hi</b> <b>probability</b> <b>events</b>	<b>High impact</b> <b>events</b>	<b>Personal</b> <b>goals, plans</b>	<b>Personal</b> <b>values</b>
<b>Activities</b> School, training Career, work Sports, hobbies Religion				
<b>Finances</b> Income, investments Expenses, debt				
<b>Health</b> Condition Medication Care				
<b>Housing</b> Home Community Country, region				
<b>Social</b> Family Friends Community				
<b>Transportation</b> Mobility Personal, auto Public				

This worksheet starts to bring everything together, your life stage, personal domains and life events. And we've added columns to bring your plans, goals and values into your framework. This framework will provide the data from which you will develop your scenarios.

### ***Plans, goals, values***

What plans have you made for this stage of life? Have you set any goals? What are your values—what's really important to you? To start, you may want to simply rank the above lines for importance. Do you feel you have a mission in life that is applicable to this stage that you are planning for?

### **Personal Scenarios**

**A worksheet for four scenarios**

Using information from the worksheets that you have already created, fill in the worksheet below with events that fit within each scenario type. Use key words in these small spaces, then make a worksheet of a full page for each scenario to organize your thoughts.

<b>Force and factors</b>	<b>Continuation of present</b>	<b>Best Plausible</b>	<b>“Wild Card”</b>	<b>Worst Plausible</b>
<b>Activities</b>				
<b>Finances</b>				
<b>Health</b>				
<b>Housing</b>				
<b>Social</b>				
<b>Transportation</b>				
<b>Goals, plans &amp; values</b>				

**Narrative-** From the information you have placed in each scenario, write a story about your life during this future life stage. Spend some time and use your imagination to make each story fit together in a logical manner. Keep in mind that what you are doing in this workbook is making educated guesses about the future, and, by creating narrative you are developing an understanding of what must happen to make your scenario work. As you proceed into the future, you will see signals as to which scenarios will or will not come about. That should give you time to adjust and prepare.



## **Personal Strategic Planning**

***Your vision of your future-*** *Create a sentence that describes your image of how you would like your life to be in the future. Emphasis here is on your desired or preferred future.*

### ***Strategies to achieve your vision***

For your preferred scenario, develop strategies to achieve that scenario. Review your other scenarios and devise strategies to deal with futures that may occur. For the negative or “worst plausible” scenario where everything goes wrong, devise strategies to prevent or avoid that future. Also consider “If...then” strategies. “If this happens, then my strategy becomes...”

**Scanning your environment-** It is important to be aware of changes in your community and the national economy as well as changing social or technological trends in the world around you. This awareness of your environment should be built into your strategies and action plans. This can translate into simple awareness – for example, when you make travel plans be aware of trouble spots and know where your currency is strong or weak.

### ***Action plans for your future***

Now you must turn your strategies into actions. What actions must you take, starting today, to achieve your preferred future? One technique to help develop action plans is called “backcasting.” Imagine yourself in a future scenario, having achieved your goals and preferences for that stage of life. What year is it? Write that year at the top-left of a page of paper, then list each year backward to the present. From the top, identify the steps you took in each year to achieve your vision and that scenario. Identify key steps, which will become goals as you work toward this future.

### ***Contingency planning***

What happens if your “wild card” scenario occurs? Or the “worst plausible”? Develop contingency plans to deal with these. “If...then” strategies are also helpful for contingency planning.

### ***Living your plan***

Start following your action plan and working toward your preferred future. Enjoy the benefits of your plan!

Strategic plan for \_\_\_\_\_ stage, ending year \_\_\_\_\_

***Vision-***

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---

***Mission-***

---

***Preferred future for this stage-***

<b><i>Domains</i></b>	<b>Events</b>	<b>Achievements</b>
<b><i>Activities</i></b>		
<b><i>Finances</i></b>		
<b><i>Health</i></b>		
<b><i>Housing</i></b>		
<b><i>Social</i></b>		
<b><i>Transportation</i></b>		

### ***Strategies for the future***

<b><i>Domains</i></b>	<b>Achievement Strategies</b>	<b>Avoidance or reduction of impact strategies</b>
<b><i>Activities</i></b>		
<b><i>Finances</i></b>		
<b><i>Health</i></b>		
<b><i>Housing</i></b>		
<b><i>Social</i></b>		
<b><i>Transportation</i></b>		

Consider strategies for each domain, particularly for events that are high impact events that have a high probability of occurrence. Use another copy of this form to develop contingency plans for high impact events with a low probability of occurrence.

***Actions to take toward your preferred future***

<b>Year</b>	<b>Actions to be taken</b> Activities-Finances-Health-Housing-Social -Transportation

This form can also be used for backcasting by simply listing the years from the future down to the present.

You have now created four future scenarios, devised strategies to achieve your preferred future and an action plan to take you to that preferred future. You have also considered contingencies and should be prepared to make adjustments to your plan. The next, most important step is very simple:

**Live your plan!**

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