

An Exploration of Generational Values in Life and at Work

Sean Lyons, M.A.

**A thesis submitted to the Faculty of Graduate Studies and
Research in partial fulfillment of the requirements for the degree
of Doctor of Philosophy, Management.**

**Eric Sprott School of Business
Carleton University
Ottawa, Ontario**

© copyright Sean Lyons, 2003



National Library
of Canada

Bibliothèque nationale
du Canada

Acquisitions and
Bibliographic Services

Acquisitons et
services bibliographiques

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*
ISBN: 0-612-94206-6
Our file *Notre référence*
ISBN: 0-612-94206-6

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this dissertation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de ce manuscrit.

While these forms may be included in the document page count, their removal does not represent any loss of content from the dissertation.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

PAGINATION ERROR.

TEXT COMPLETE.

ERREUR DE PAGINATION.

LE TEXTE EST COMPLET.

Abstract

The notion of values differences between generational cohorts has received much attention in the media and popular press, but has generated little empirical research. This exploratory study empirically examined differences in general and work values that exist between the various generational cohorts that comprise modern society: the Echo generation, Generation Xers, Baby Boomers and Matures. An effort was made to control for the influence of developmental progress through the life-cycle through the inclusion of lifecycle variables in the analyses. A questionnaire containing measures of general values and work values was administered to 1,196 Canadian knowledge workers.

The results indicated significant generational differences in nine of the ten general values studied and in three of the six work values, even when the impacts of lifecycle were taken into account. Younger generations (i.e. the Baby Boom Echo and Generation Xers) place more importance on the values associated with openness to change and self-enhancement than do older generations (i.e. Baby Boomers and Matures). In the work setting, younger generations value status and a social working environment more than do the older generations. The older generations, on the other hand, place more importance on altruistic work values. No support was found for the popular belief that the work ethic is in decline amongst younger generations.

These results moderately support the depictions of the various generations provided in the anecdotal popular press literature, but suggest that these depictions are exaggerations of the actual differences that exist between generations. It was concluded that generation, as specified in this study, is a viable and useful explanatory variable in investigating differences in general and work values.

Acknowledgements

I offer my sincere thanks to all of the people who graciously gave me their time and encouragement throughout the long journey through the dissertation process. This thesis could not have been completed without the tireless patience, advice and championing of my thesis supervisor, Dr. Linda Duxbury. Dr. Duxbury consistently provided me with timely and frank feedback throughout the entire dissertation process and always made time for my concerns, despite her multiple other commitments. The willingness of Dr. Duxbury and her colleague, Dr. Christopher Higgins, to allow me to contact their research subjects made this study possible.

I also wish to thank my colleague and friend, Linda Schweitzer, for her invaluable input and for leading me serendipitously to the work of Karl Mannheim.

My research effort was aided greatly by the small group of Carleton students who assisted me in contacting potential research respondents: Justin Murray, Andrew Kent, Keisha Brown, Megan Price and Rathika Sitsabaiesan.

I thank the Canadian Council of Regional Public Service Youth Networks for their assistance and comments, and their membership for taking the time to complete the survey.

I am also grateful to the members of my doctoral dissertation committee, Dr. David Cray, Dr. Harvey Krahn, Dr. Judith Madill, Dr. Jon Pammett and Dr. Roland Thomas, who volunteered their time and energy to this endeavour and who offered me the benefit of their vast accumulated experience.

Finally, this dissertation would not have been possible without the constant love and support of my wife Tiffany, to whom I dedicate this thesis.

Contents

Abstract	iii
Acknowledgements	iv
Introduction	1
1 Introduction	1
1.1 Objectives of this Thesis	3
1.2 Relevance of this Research	4
1.3 Structure of this Thesis	6
Part One: Literature Review	8
2 The nature of human values	10
2.1 Values Defined.....	11
2.2 Values Distinguished from Related Concepts	23
2.3 The Content and Structure of Values: A Review of the Major Theories	31
2.4 Summary.....	43
3 Work related values	45
3.1 The Relevance of Values to the Study of Work.....	46
3.2 Work Values and General Values	48
3.3 Conceptions of Work Values in the Literature	57
3.4 Integration: Putting the Pieces Together	84
3.5 Summary.....	86
4 The Theory of Generations and Adult Development	87
4.1 Mannheim's (1952) Theory of Generations.....	88
4.2 Challenges in the Study of Generations.....	101
4.3 The Role of Adult Development in Generational Differences ..	112
4.4 Summary.....	127
5 Generations, Values and Work	130
5.1 Challenges in Describing the Generations	131
<u>An Overview of the Generations</u>	
5.2 Matures: Born Before 1946	138
5.3 Baby Boomers: Born 1946-1961	149
5.4 Generation X: Born 1962-1979	162
5.5 Baby Boom Echo: Born in the 1980s and Beyond	181
5.6 Intra-Generational Differences	191
5.7 Concluding Thoughts: Generational Profiles.....	193
6 Age-Related Values Findings.....	195
6.1 Taylor and Thompson (1976).....	197
6.2 Buchholz (1978).....	199
6.3 Cherrington, Condie and England (1979).....	200
6.4 Wayne (1989).....	204

6.5	Protestant Work Ethic Findings	205
6.6	Summary: Age Related Findings.....	207
Part Two: Research Study		209
7	Research Objectives	210
8	Methodology	214
8.1	Operational Definitions of Concepts	214
8.2	Subjects.....	217
8.3	Measures.....	224
8.4	Procedures	254
9	Results	268
9.1	Sample Characteristics.....	268
9.2	General Values of the Various Generational Cohorts.....	270
9.3	General Values Differences between Generational Cohorts ...	274
9.4	Work Values of the Various Generational Cohorts	290
9.5	Work Values Differences between Generational Cohorts.....	293
9.6	Protestant Work Ethic Adherence of the Various Generational Cohorts	298
9.7	Generational Differences in Adherence to the Protestant Work Ethic.....	299
10	Discussion.....	304
10.1	General Values of the Various Generational Cohorts.....	304
10.2	General Values Differences between Generational Cohorts ...	309
10.3	Work Values of the Various Generational Cohorts	320
10.4	Work Values Differences between Generational Cohorts.....	325
10.5	Protestant Work Ethic Values of the Various Generational Cohorts	330
10.6	Generational Differences in Protestant Work Ethic Values.....	331
11	Conclusions	333
11.1	Conclusions.....	333
11.2	Contributions of this Research	336
11.3	Limitations of this Research	337
11.4	Directions for Future Research.....	342
References		345
Appendices		359

List of Tables

Table 2.1	Definitions of Value Types (Schwartz, 1992).....	40
Table 3.1	Dose's (1997) Typology of Work Values Foci	58
Table 3.2	Factor Analysis Results for the Mirels and Garrett (1971) PWE scale.....	80
Table 4.1	The Adult Stages of Erikson's Model of Psychosocial Development.....	118
Table 4.2	Developmental Periods in the Early and Middle Adulthood of Men	121
Table 4.3	Havighurst's (1953) Adult Developmental Tasks.....	127
Table 5.1	Typologies of Generations.....	133
Table 5.2	Generations and their Developmental Periods	138
Table 8.1	Sampling Frame	219
Table 8.2	Definitions of Value Types (Schwartz, 1992).....	237
Table 8.3	Factor Analysis of Work Values Items	248
Table 8.4	Blau and Ryan's (1997) Work Ethic Measure	252
Table 8.5	Breakdown of Method of Response by Generation	255
Table 9.1	Generational Breakdown of Sub-samples	269
Table 9.2	Characteristics of the Final Sample	270
Table 9.3	Mean SVS scores by Generation	271
Table 9.4	Mean Value Scores and Higher-Order Values by Generation.....	273
Table 9.5	Summary of Results of Multivariate F-tests for MANOVA 1 ..	275
Table 9.6	Mean General Value Scores for MANOVA 1	277
Table 9.7	Summary of Results of MANOVA 2 – General Values by Lifecycle by Gender.....	281
Table 9.8	Univariate F-tests of Generation X Lifecycle Interactions	282
Table 9.9	Summary of Results – Separate Male and Female MANOVAs.....	284
Table 9.10	Significance Levels of Multivariate F-tests – Male Sub-sample	286

Table 9.11	General Values Differences – Generation X and Baby Boomer Women	287
Table 9.12	General Values Differences – Generation X and Boomer Men.....	288
Table 9.13	Work Value Scores for the Various Generations	291
Table 9.14	Mean Work Value Scores by Generation and Gender	294
Table 9.15	Mean Work Value Scores by Gender and Lifecycle Stage – Generation X and Baby Boomers.....	296
Table 9.16	Descriptive Statistics for Protestant Work Ethic Factors by Generation.....	299
Table 9.17	Mean PWE Scores by Gender and Generation	301
Table 10.1	Significant Generational Differences in General Values	318
Table 10.2	Significant Generational Differences in Work Values	329

List of Figures

Figure 2.1	The Relationship Between Attitudes and Values	25
Figure 2.2	The Schwartz Model of Human Values	41
Figure 2.3	Sinusoid Relationship of Correlations Between Value Types & Outside Variable	43
Figure 3.1:	Elizur and Sagie's (1996) Conical Representation of the Values Domain.....	51
Figure 3.2	The Values – Attitude Continuum for Work	56
Figure 3.3	Detailed Values–Attitude Continuum for Work	86
Figure 5.1	Generational Timelines.....	135
Box 5.1	Fundamentals of the Mature Generation.....	146
Box 5.2	Fundamentals of the Baby Boom Generation.....	156
Box 5.3	Fundamentals of Generation X.....	179
Box 5.4	Fundamentals of the Echo Generation.....	189
Figure 8.1	The Schwartz Model of Human Values	234

List of Appendices

Appendix A: Items Included in the Rokeach Values Survey	361
Appendix B: Work Values Inventory (Super, 1970)	362
Appendix C: The Items from the Minnesota Importance Questionnaire	364
Appendix D: Mirels and Garrett's (1971) Protestant Ethic Scale	365
Appendix E: Blau and Ryan's (1997) Work Ethic Scale	366
Appendix F: Annotated Bibliography of Generational Literature.....	367
Appendix G: Adams's (1998) Value Tribes.....	372
Appendix H: The Schwartz Value Survey (SVS)	374
Appendix I: SEM Path Diagram for the 10 SVS Factors	376
Appendix J: Work Values Measures Reviewed for this Study	378
Appendix K: Work Values Items Included in this Study	380
Appendix L: Correlation of Work Values Intensity and Priority Measures ...	381
Appendix M: SEM Path Diagram for the PWE Factors	382
Appendix N: Survey Questionnaire.....	384
Appendix O: SPSS Output for MANOVA 1 – General Values (All Generations X Gender).....	393
Appendix P: SPSS Output for MANOVA 2 – General Values (Baby Boomers and Generation Xers X Gender X Lifecycle)..	398
Appendix Q: SPSS Output of Pairwise Comparisons of Lifecycle Stages for Generation Xers and Baby Boomers.....	402
Appendix R: MANOVAs for Male and female Sub-Samples – Generation Xers and Baby Boomers (General Values)	406
Appendix S: One-Way MANOVAs (Generation) for Male Respondents in Each Lifecycle Stage.....	411
Appendix T Logistic Regression of General Values Items that were Opposed to Respondents' Values.....	417
Appendix U SPSS Output for MANOVA 1 – Work Values (All Generations X Gender).....	421
Appendix V SPSS Output for MANOVA 2 – Work Values (Baby Boomers and Generation Xers X Gender X Lifecycle)..	425

Appendix W	Logistic Regression of Work Values Items that were Opposed to Respondents' Values.....	428
Appendix X	SPSS Output for MANOVA 1 – Protestant Work Ethic (All Generations X Gender).....	437
Appendix Y	SPSS Output for MANOVA 2 – Protestant Work Ethic (Baby Boomers and Generation Xers X Gender X Lifecycle)..	440

1

Introduction

An ancient Arab proverb proclaims, “Men resemble the times more than they do their fathers.” The idea implicit in this aphorism is that there is a cohesive social force that binds historical contemporaries; that there is a shared worldview amongst people born and raised in the same time period. This principle underlies the notion of generations as categories that can be used to understand dynamic social relations between the young and the old. While the notion of generation is far from new, there has been a surge of attention given to this topic in recent years. Media reports of the disillusionment of today’s youth and the decline of traditional values abound. Popular press publications concerning generational shifts in values and their implications for managers and marketers continue to clutter the shelves of the bookstore’s business section. Introductory textbooks in marketing, organizational behaviour and human resources management all highlight the importance of generational differences as an element of today’s business environment.

An issue of particular concern in recent years has been the movement of generational conflict into the workplace. As the Baby-Boomer cohort edges closer to retirement, a new generation of employees and managers is needed to replace them. Furthermore, the rapid pace of technological change necessitates the skills of younger employees with more current and up-to-date knowledge and technological skills. Unfortunately, the increased need for a younger workforce appears to coincide with an increasing sense of generational divergence in the

workplace. A litany of newspaper and magazine articles and television reports have decried the decline of the work ethic in North America, as post-Baby Boomers (commonly referred to as *Generation X*, in reference to Douglas Coupland's (1991) eponymous novel) are seen to have entered the labour force demanding more from their companies and bosses and offering less and less in return (e.g. Losyk, 1997; Cooper, 1990; Karp and Sirias, 2001; Smola and Sutton, 2002). Others have hailed Generation Xers as the workforce of the future, arguing that their approach to work could serve as a model for older generations to emulate (e.g. Solomon, 1992; Tulgan, 1997). Whether viewed positively or negatively, it is clear from the number of articles and books that have been published on the subject that there is a pervasive belief that generational differences are an important aspect of the modern workplace, and certainly one that merits further investigation. Generational experts Lancaster and Stillman (2002) went as far as to pronounce generational differences the 'newest form of diversity' in the workplace.

The purpose of this thesis is to empirically investigate inter-generational differences in general and work values. While generational differences have traditionally been discussed in vague terms such as 'generational identity,' 'youth culture' and 'generational worldviews,' little attempt has been made in the past to assess the precise content of generational differences in terms of existing psychological and sociological variables. This thesis is premised on the supposition that values, as core psychological beliefs about the importance and

desirability of courses of action and ultimate goals of existence, must play a significant part in any observed generational differences. Since there is little extant theoretical or empirical evidence linking the concepts of values and generations, this thesis is intended to be an exploratory venture in that direction.

1.1 Objectives of this Thesis

While a number of popular-press publications have been written suggesting broad characterizations of the various generations, there has been relatively little empirical investigation of specific values differences between generations (Karp & Sirias, 2001). It is therefore the intention of this research to investigate the claims made regarding generational differences in the non-academic literature through an empirical analysis of general values and work values as they are related to the concept of generation. The primary objective of this research is to determine whether there are indeed discernable patterns in general values and work values that coincide with generational membership.

Because this study is cross-sectional in nature, an important theoretical issue is immediately evident. Age is the key demographic determinant of generational membership. It is also, however, strongly associated with one's life-cycle stage and development. Lifecycle stage may therefore be a critical confound in any analysis of generational differences in values. Thus, a secondary objective of this study is to examine whether age-related differences in values, should they be found to exist, are attributable to differences in life-cycle

stage, or whether they are genuinely attributable to generational differences created by changes in the social and historical context.

Past research has provided contradictory evidence regarding the role of gender in determining general and work values. If gender-related differences in values are evident, they may confound the relationship between generation and values. It is therefore necessary to control for the impact of gender when studying the link between generation and general and work values.

To summarize, this thesis seeks to address the following four research questions:

- What are the general values that are important to members of the various generations?;
- What are the work values that are important to members of the various generations?;
- Are there significant differences between generational cohorts in the importance they ascribe to various general values when the effects of lifecycle and gender are taken into account?; and
- Are there significant differences between generational cohorts in the importance they ascribe to various work values when the effects of lifecycle and gender are taken into account?.

These research questions are discussed in detail in chapter seven.

1.2 Relevance of this Research

The study of values has widespread implications for the understanding and prediction of human behaviour. As a core psychological construct, values

hold an important place in behavioural theory. Because values are a social variable, as well as an individual variable, identifying the values held by members of a particular social group provides us with valuable information about broader social trends. In particular, the identification of generational value patterns helps us to understand the ways in which society's values are changing over time.

The study of work values is beneficial to managers for a number of reasons. First, values have been hypothesized to be a key element of job satisfaction and employee motivation (Locke, 1976, 1991). Understanding what it is that employees value in their work is critical to ensuring their satisfaction and the effective use of rewards to motivate behaviour. Second, work values have been theoretically linked to employee turnover (e.g. Steers and Mowday, 1981). As such, values hold the power to identify key factors in retaining employees. In the 'knowledge-based economy,' where people are seen to be an organization's prime asset (Drucker, 1992), retaining valued employees is a top concern. Third, as the North American workforce continues to age, and the 'Baby Boomers' edge toward retirement, organizations must focus on the attraction and retention of younger employees to succeed them; young employees with the requisite skills and knowledge to replace their experienced elders. Understanding the values that the younger generational cohorts bring to their work will be essential in the competitive attraction of qualified applicants. Finally, a number of popular press publications have suggested the existence of a 'generational divide' in the modern workplace. If such intergenerational conflict does indeed exist, it seems

likely that differences in values play a large part. Identifying and understanding generational values differences will be key to diffusing such tensions.

1.3 Structure of this Thesis

This thesis is divided into two parts. Part one contains the literature review and is divided into five chapters. Because this thesis represents the integration of the disparate fields of values research and generational research, separate literature reviews were conducted for each. Chapter two examines the concept of values as it has been theorized in the social sciences literature, particularly by psychologists and sociologists. Chapter three presents an examination of the varied conceptions of work values that have been put forth in the amorphous literature.

In chapter four, the theoretical bases for generation as a salient social variable are explored, and the nature of generations is discussed. Challenges and limitations inherent to the study of generations are also explicated. The role of adult development in the study of generations is also discussed in this chapter, along with a brief review of some of the major models of adult development. Chapter five integrates the concepts of values, work and generation through an examination of popular depictions of the generations that currently exist in the labour force. Through a review of popular publications on the generational issue, each generation is described in terms of its salient formative experiences and the general and work values it is purported to have developed. In chapter six, prior

age-related findings regarding work values are reviewed in context in order to generate a fuller depiction of the generations from a research perspective.

Part two of this thesis describes the research study that was undertaken to explore generational differences empirically. In chapter seven, the research objectives are discussed in detail. Chapter eight describes the methodology employed in this study. The results of the various analyses undertaken as part of this study are presented in chapter nine. The research findings are discussed in detail in chapter nine. Key conclusions, limitations of this thesis and avenues for future research are given in the final chapter of this thesis.

Part One: Literature Review

The exploratory and multidisciplinary nature of this thesis necessitates a review of varied and disparate fields of study. In order to understand the theoretical underpinnings of generational value differences, we must first understand the concepts of values and generation. Part one of this thesis reviews the extant theory and research concerning these topics.

Because of its centrality to our understanding of human motivations and behaviour, the concept of values has broad appeal that spans the social sciences. Recent years have seen growing interest in the study of values in general and in the more specific domain of work values (Elizur, 1996; Elizur and Sagie, 1999; Super, 1995). Unfortunately, the benefits arising from the multiple perspectives contributing to values research are somewhat mitigated by the lack of integration that is endemic of such a multi-disciplinary concept. The disunity of the research makes a thorough investigation of the values concept an onerous task. Yet the objectives of the present research demand more than just a narrow definition of values. Understanding trends in work values requires an appreciation of the values that individuals (and consequently groups) hold in general, as well as in the specific sphere of work.

Chapters two and three of this thesis are therefore dedicated to providing a theoretical and empirical foundation for the concept of values. Chapter two explores the concept of values in general, defining the concept and its relationship to other concepts, and then explores the various theoretical models

of values that have been proposed in the literature. Chapter three focuses on the application of the values concept to the realm of work, looking first at the relationship between general and work values, and then reviewing the major conceptions of work values that have been proposed in the literature.

Once the theoretical foundations of values and work values have been discussed, the literature review turns to the concept of generations. Chapter four explores the theoretical underpinnings of the notion of generations as important units for social analysis. The seminal work of sociologist Karl Mannheim on this topic is reviewed, leading to a discussion of how generations are formed, what makes them unique and how their boundaries are identified. The case is then made for employing values as a construct to examine generational differences. Finally, the role of the human life-cycle in the interpretation of generational values is discussed.

Chapter five examines in detail the generations that currently exist in the workforce, as they are discussed in the popular press. Each generation is examined with respect to its formative context and resultant general and work values.

Although there has been very little empirical consideration of the values construct as a generational variable, there are some findings concerning more general age-related patterns in values. Chapter six reviews the extant empirical findings regarding the relationship between age and values.

2 *The Nature of Human Values*

While the concept of human values has ancient roots in the discourse of philosophers (Super, 1995), the study of values has more recently become a concern for contemporary behavioural scientists, who have recognized the concept as a useful tool in understanding human motivation and behaviour. Rokeach (1973) suggests that “the concept of values, more than any other is the core concept across the social sciences. It is the main dependent variable in the study of culture, society and personality, and the main independent variable in the study of social attitudes and behaviour” (p. xi). Unfortunately, for a variety of reasons explored below, the concept of values is also among the most vague and poorly defined concepts used by behavioural researchers. Because the word ‘values’ is used liberally throughout the social sciences to connote a number of different and loosely related concepts, it is often very difficult to detect any semblance of singular meaning across sources. The result has been a great disparity in thinking about the nature of values and the role they play in human thought processes and in motivating behaviour.

Given the relatively amorphous nature of the values concept, a precise definition is prerequisite to its study. This chapter examines the literature on human values in an effort to define the concept of values and identify its key components. Values are considered first at the general level before moving on to a discussion of work-related values in the next chapter. The nature of human

values is first explored as put forth by some of the most prominent authors on the topic. Values are defined, followed by an explication of the main concepts embedded in the definitions. The functions that values play in our lives are then discussed, followed by a number of distinctions between values and other related concepts.

2.1 Values Defined

As noted previously, a discussion of the nature of values is confounded by the multitude of definitions that have been ascribed to this term. The word has been used in the literature to describe a number of related and sometimes unrelated concepts, including knowledge and beliefs (Williams, 1979), attitudes, social norms, needs, traits, interests, goals (Rokeach, 1973) and personal philosophy and ideology (Kluckhohn, 1951). Colloquially, values are sometimes equated to broad societal conceptions of good and bad, virtue or vice, which are linked to culture or time periods. This connotation is apparent in such commonly used terms as “family values,” “American values,” and “contemporary values,” and is sometimes used interchangeably with the word “ethics,” (e.g. Blood, 1968; Bernstein, 1997). The confusion surrounding the definition of values makes it necessary to define precisely what is meant by the term in the specific context of this study. Indeed, a clear operational definition of values is a major step in explicating the nature of values.

Perhaps the most commonly cited definition of values is that put forth by Milton Rokeach, who is one of the most prominent and influential writers on

values and value systems (George and Jones, 1997). Despite the disparity in values theory noted earlier, the core concept of values as elucidated by Rokeach has become widely accepted and adopted within the academic community to the point of near consensus (Ronen, 1978). Rokeach's work will thus receive significant attention in this chapter.

In his seminal work, *The Nature of Human Values*, Rokeach defined a value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach, 1973: 5). Though almost thirty years have passed since this definition was proffered, it has proven to be robust, and continues to be employed widely by researchers and theorists (e.g. George and Jones, 1997; Erez and Earley, 1993; Schwartz and Bilsky, 1987). Rokeach's (1973; 1979) thorough conceptualization of values crystallized previous theory and provided a strong basis for future theorizing and research. As evidenced by the ubiquity of references to his work, Rokeach's contribution to the study of values has been immeasurable. For this reason, the various elements of his conceptualization provide an excellent starting point for a general discussion of the nature of human values.

Schwartz and Bilsky (1987) presented a succinct depiction of Rokeach's (1973) conceptualization of values, elucidating five features that describe the formal characteristics of values. They noted that values are "(a) concepts or beliefs, (b) about desirable end-states or behaviours, that (c) transcend specific

situations, (d) guide selection or evaluation of behaviour and events, and (e) are ordered by relative importance” (Schwartz and Bilsky, 1987: 551). As can be seen, this definition incorporates the key elements of Rokeach's definition of values presented above. Their definition also educates a number of other aspects of values that are inherent in Rokeach's (1973) conceptualization. The qualities of values represented in these definitions will now be examined in turn as a means of explicating the key elements of the values concept.

2.1.1 *Values are Beliefs or Conceptions*

Most definitions of human values refer to them specifically as ‘beliefs’ or ‘conceptions.’ While the distinction between these terms may seem to be a matter of semantics, there are important underlying differences between the terms that merit exposition. Kluckhohn (1951) referred to values as “conceptions of the desirable.” He used the term *conception* to indicate that values are logically constructed abstractions based on individual experience. He explicitly distinguished values from beliefs, noting that “*Belief* refers primarily to the categories ‘true’ and ‘false’; correct and incorrect. *Value* refers primarily to ‘good’ and ‘bad’; ‘right and ‘wrong’” (p. 432). In proffering this definition, Kluckhohn highlights the affective or emotional judgment element of values, which he perceived to be absent from beliefs.

Rokeach (1973) viewed beliefs somewhat differently from Kluckhohn, offering a more detailed definition that identified three distinct types of beliefs: descriptive or existential beliefs – those capable of being true or false; evaluative

beliefs – wherein the object of the belief is judged to be good or bad; and prescriptive beliefs – where some means or end of action is judged to be desirable or undesirable. This broader definition incorporates the more limited definition put forth by Kluckhohn, but goes further, to include an affective component as well. Rokeach (1973) considers values to represent prescriptive beliefs, which implies judgment of desirability, corresponding roughly to Kluckhohn's definition of a value as a "conception of the desirable." The fact that values are not seen to be evaluative beliefs separates them from descriptive judgments, a point that will be discussed in detail in section 2.1.3 below.

Whether values are viewed as beliefs or conceptions is not important, as long as the core concept is defined similarly. What is common to the definitions of Rokeach (1973) and Kluckhohn (1951) is that they both view values as simultaneously cognitive (logically constructed) and affective (having an emotive or *feeling* component). Also implicit in these definitions is the notion of *direction* (Hofstede, 1980), which indicates that values, as beliefs, are not merely neutral or objective observations, but have either a negative or positive affectation associated with them. Williams (1979) illustrated these attributes of values when he noted, "Persons are not detached or indifferent to the world; they do not stop with a merely factual view of their experience. Explicitly or implicitly they are continually regarding things as good or bad, pleasant or unpleasant, beautiful or ugly, appropriate or inappropriate, true or false, virtues or vices." (p. 16)

2.1.2 *Values are Enduring*

Values are commonly believed to be deeply ingrained elements of our personalities. They are thought to be learned early in life through our own experience or observation and discussion of the experiences of others (Rokeach, 1972, 1973; Williams, 1979; Hofstede, 1980). Williams (1979) notes, “values are simultaneously components of psychological processes, of social interaction, and of cultural patterning and storage” (p.17). Some values are explicit, and an individual may be able to state the value, demonstrate its application in making judgments and clearly define its boundaries. Other values are implicit, and one may even be unconscious of some of his/her individual values until they are activated in a specific situation (Williams, 1979).

The deeply ingrained nature of values requires that individual values be relatively stable over time. This is particularly important when we consider that one’s values act as guides to action. Rokeach (1973) argues that, while the importance of a value relative to other values may change during one’s life, the intensity and direction of a value is likely to remain stable over time. For instance, one’s value toward freedom may become more or less relevant as he or she ages, yet he or she is unlikely to change the direction of his/her belief about freedom, or the intensity of that belief when considered in isolation.

2.1.3 *Values as Evaluative Criteria or as Evaluations*

A recurrent debate in the values literature revolves around whether values represent that which is *desired* or the generalized quality of *desirability* (c.f.

Hofstede, 1980; Kluckhohn, 1951, Rokeach, 1973). Many theorists conceptualize values as latent constructs that individuals use as standards or criteria to judge the desirability and hence, the importance, of specific behaviours, objects or states (Dawis, 1991; Dose, 1997; Roe & Ester, 1999). Kluckhohn (1951), for instance, refers to values as “conceptions of the desirable,” while Fallding (1965) speaks of values as referring to the innate “worthwhileness” of objects or behaviours. From this perspective, values do not represent evaluations of specific stimuli (evaluative beliefs in Rokeach’s (1973) vernacular), but rather the generalized, underlying criteria or standards that are used to formulate those evaluations. Values can thus be envisioned as a mediating construct or relationship between one’s affective orientation and the specific object being evaluated (Zytkowski, 1970; Roe & Ester, 1999). Mandler (1993) summarizes this perspective by defining a value as “some representation that shapes our likes, dislikes, preferences, prejudices, and social attitudes, that informs (but does not constitute) our moral judgments and – in general – that makes it possible for us to say what is good and what is bad” (p. 233).

The conceptualization of values as evaluative standards is prevalent, but is not universally accepted. Other theorists have represented values as concrete evaluation of objects, behaviours or states of existence. From this perspective, values are expressions of specific preferences between opposing objects, behaviours or modes of action. For instance, Locke (1976) defined values as “what a person consciously or subconsciously desires, wants, or seeks to attain”

(p. 1304). Similarly, Super (1980) defined values as “desirable states, objects, goals, or behaviours, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behavior” (p. 130). Both of these conceptualizations of values envision them as evaluations of what is desired, rather than as the criteria for what makes them desirable. Desirability is the more abstract concept, representing the underlying judgments that cause an individual to desire something.

While the theoretical distinction between desirability and the merely desired, the evaluative standard and the evaluation itself, may seem ostensibly pedantic, it has practical importance in the measurement of values. The conceptualization that is selected by the researcher, either consciously or subconsciously, ultimately determines the types of research tools employed, as well as the wording of any self-reporting measures used. As will be seen in the discussion of work values in Chapter three, different underlying conceptualizations of values have resulted in varying approaches to the measurement of values.

2.1.4 Values Refer to Modes of Conduct or End-States of Existence

One of Rokeach's (1973) greatest contributions to the study of values is his suggestion that values refer to both modes of behaviour or end states of existence. He labeled those values referring to modes of conduct “instrumental values” and those related to end-states “terminal values.” Hence, terminal values are beliefs about the desirability of certain ends, while instrumental values are

beliefs about the desirability of means to those ends. Rokeach (1973) further elaborated two types of instrumental values and two types of terminal values. According to him, instrumental values can either be “moral values” – referring to modes of behaviour which, when violated, evoke feelings of guilt or immorality on the part of the individual, or “competence values” – those values that, when violated, leave the individual feeling personally inadequate or incompetent. Terminal values may be “personal” – centred on an end-state that is restricted to the individual (such as salvation), or “social” – centred on an end-state pertinent to society as a whole (e.g. world peace).

It is important to note that instrumental values do not pertain to specific situations, but represent overall beliefs about general modes of conduct. For instance, a belief that people should be honest (the value of *honesty*) pertains to a general mode of conduct, and is not a judgment of how to behave in a specific situation. It might very well be that an individual who strongly values honesty lies in certain situations (such as white lies). Isolated values are not generally believed to be direct determinates of action; their impact on behaviour is complex and indirect¹.

Notably absent from Rokeach’s (1973) typology of values is a class of values referring to beliefs about the desirability of objects, such as jobs, organizations, social groups and material possessions. Since, as noted above,

Rokeach (1973) and others view values as abstract beliefs about desirability, rather than concrete assessments of what is desired, values are seen to transcend specific situations and objects. The transcendental nature of values is a key element that separates them from other, less abstract psychological constructs, such as attitudes, interests, preferences, and motives (Rokeach, 1973; Schwartz, 1992, 1994; George & Jones, 1997; Elizur & Sagie, 1999). This stands in contrast to the perspective, outlined above, which views a value as that which is desired, which does not exclude specific objects from the content of values.

2.1.5 Values are Social as well as Individual

Values are not uniquely personal phenomena, but are shared among individuals. It is this characteristic of values that makes it possible to identify such things as “North American values,” “middle class values,” and “youth values.” Shared values, along with social norms, are key elements in the definition of a society’s culture (Schein, 1985; Hofstede, 1980). Since, as we have seen, individuals do not learn solely through their experiences, but through observation of the experiences of others and through the process of socialization, social values must clearly play a large part in the development of individual values. This corresponds with Bandura’s (1977) *Social Learning Theory*, which

¹ A discussion of the relationship between values and behaviour is beyond the scope of this review. This topic is discussed in more depth in Locke (1991) and Kristiansen and Hotte (1996).

states that much of the learning we do as individuals occurs through the observation and modeling of the behaviours, beliefs and reactions of others.

According to Bandura (1977):

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22).

In this model, values serve the integral 'coding' function that allows us to assess our experiences, make sense of them and extrapolate to apply them in specific circumstances. This idea is consistent with Rokeach's (1973) suggestion that values have a *knowledge*, or *self-actualization* function, helping us to organize and understand our beliefs by codifying them into a clear and consistent cognitive framework. Values thus provide us a means of grouping and discussing our beliefs so that they can be understood, shared and employed. As such, they also play an integral part in the process of sense-making, as theorized by Weick (1995) (Roe & Ester, 1999).

Another social attribute of values is that an individual's values may relate to him/herself alone, or may be intended to relate to people in general. For instance, one's holding the value of honesty may imply that he or she believes that it is desirable for him/her to act honestly, or it may imply that he or she believes that it is desirable for everyone to act honestly. Rokeach (1973) asserts that humans do not necessarily distinguish between values that are intended to

serve their own interests and those that are intended to serve the interests of humankind. This notion is echoed by Schwartz and Bilsky (1987), who found 'interests served' to be a significant dimension of the values construct. Because values have a strong affective component, it is not difficult to imagine that individuals may project their values as being pertinent to people in general.

Rokeach (1973) also noted that individuals do not necessarily intend values to be applied equally to everyone as to themselves. For instance, parents frequently impose a double standard of desirability in relation to their children. What parents consider to be desirable for themselves is likely to differ from what they believe to be desirable for their children. As this example demonstrates, values can be applied with a great degree of flexibility. For instance, if one holds the value of honesty, it is difficult to ascertain whether he or she believes honesty to be a desirable mode of conduct for everyone, or just him/herself, and to what degree honesty is desirable when applied to different people and situations.

The shared nature of social values introduces an interesting aspect to the concept: that of social desirability. Hofstede (1980) noted that 'social desirability' is normally considered to be something of an anathema in behavioural sciences, as it confounds the measurement of reality. Researchers usually seek to discover the 'true' beliefs, attitudes, etc. of a respondent, not those that the respondent offers because he or she views them as socially desirable and thus more appealing to the researcher. As such, social desirability is normally treated as *noise* that must be filtered out of valid measures. Yet desirability is an

appropriate element in the study of values, as it is key to the understanding the individual values that comprise one's overall philosophy or ideology (Kluckhohn, 1951, Ravlin and Meglino, 1987; 1989). Desirability underpins the normative nature of values – it relates to beliefs about what *ought to be*, rather than what *is*. Ravlin and Meglino (1987; 1989) noted that the social desirability or “oughtness” of values is a key element of the construct, and is a product of the social nature of the construct itself. Since, as we have seen, values are socially learned, it stands to reason that socially desirable values would be those that are emphasized and perpetuated through socialization and learning processes. Additionally, Rokeach (1973) posited that values serve an *adjustive* function in that they help the individual adapt to group pressures. Such values as compliance, obedience, politeness and self-control are important to successful social interaction, and are thus perpetuated because of their social desirability.

If it is assumed that we internalize broader social values and share our personal values with others, then our values and those of our society and the groups to which we belong must be inextricably linked. The intricate way in which individual and social values are linked is a subject well beyond the scope of this paper². A detailed investigation of this topic would require examination of the confluence of psychological and sociological theories, an onerous task to say the least. Yet the shared nature of values is central to the theme of the present

² Williams (1979) provides an overview of the link between individual and social values and the modes through which they evolve.

research, as commonalities in the values of a social group (e.g. an age cohort) would imply that values are shared amongst the members of that group, and that these commonalities may be the result of group members having acquired their values in some common way. This notion will be explored in greater detail in Chapter four in the more specific context of generations.

2.2 Values Distinguished from Related Concepts

As noted earlier, the conceptualization of values has suffered from a confounding of the term with related and sometimes unrelated concepts. Values have been variously described as needs, goals, personality traits, motivations, attitudes, beliefs, preferences, interests, utilities, perspectives, opinions, and objectives (Meglino & Ravlin, 1998; Blicke, 2000; Locke, 1976; Rokeach, 1973; Sverko and Vizek-Vidovic, 1995). Given the ambiguity inherent in the nomological network of values, it is necessary to make some attempt at distinguishing between values and other, related constructs. The following subsections provide distinctions between values and other major psychological constructs.

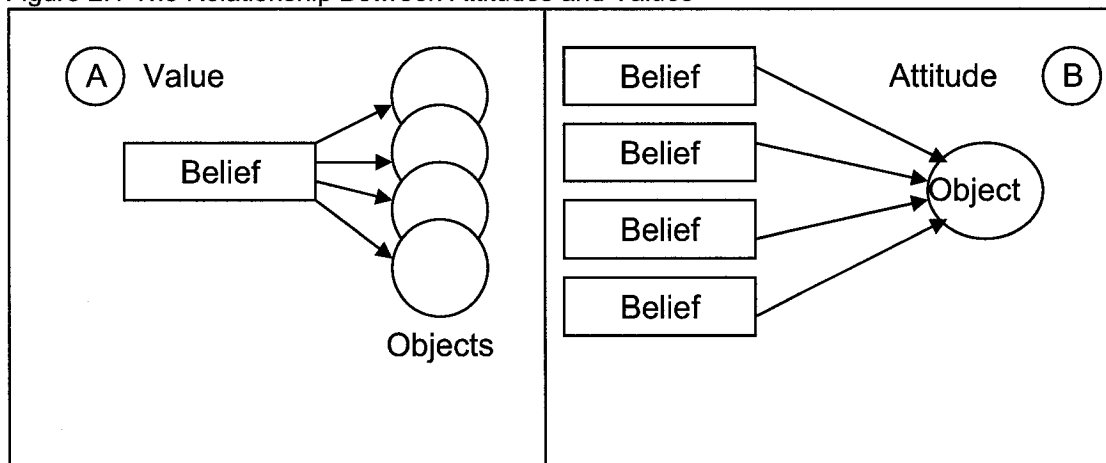
2.2.1 Values and Attitudes

The concept most closely related to and often confounded with values is that of attitudes. Attitudes have received much more attention in the academic literature than have values, largely because they are less abstract and are therefore more easily employed as research variables (Rokeach, 1973).

Rokeach (1973) estimated that attitudes had been the subject of five to six times as many studies as had values in the early 1960s alone. Despite the volumes that have been written on this topic, it appears that there remains a high degree of confusion regarding the precise distinction between values and attitudes. While most theorists recognize the two as distinct concepts, there is a lack of consensus about the precise relationship between them. In fact, some authors define values as simply collections of attitudes (e.g. Pennings, 1970; Sverko and Vizek-Vidovic, 1995).

Perhaps the most often cited distinction between values and attitudes comes from Rokeach (1973), who noted, "An attitude differs from a value in that an attitude refers to an organization of several beliefs around a specific object or situation. A value, on the other hand, refers to a single belief of a very specific kind" (p. 18). Rokeach's conception of the two concepts is depicted in Figure 2.1. Diagram A reflects a value, which is seen as a generalized belief that applies across multiple objects. Diagram B represents an attitude - a number of separate beliefs brought to bear on a single object. George and Jones (1997) elaborated on this distinction with a model that differentiates between the two concepts on three dimensions. First, they argued that values and attitudes differ with respect to their temporal perspective; values are prospective, focused on the way things should be, while attitudes are retrospective, focused on an evaluation of what has happened. Second, they proposed that values and attitudes differ in their dynamism; while values are stable across objects,

Figure 2.1 The Relationship Between Attitudes and Values



contexts and experiences, attitudes are bound to the context in which the object is set. Lastly, they posited that values and attitudes differ in their focus; while values have a general focus - the transcendental nature discussed earlier - attitudes are targeted at a specific object. These basic differences are supported by a number of other authors as well (e.g. Dawis, 1991; Roe & Ester, 1991; Dose, 1997; Rokeach, 1968, 1973).

These distinctions indicate that values are generally seen as the more abstract psychological construct from which attitudes are formed. Recall that the distinction was made earlier between evaluative standards and the evaluations of an object. Rokeach (1968) stated that values serve as standards, while attitudes are evaluations of a specific object given a number of relevant standards. As such, values are positive mental constructs, reflecting the criteria that make an object good or preferable, while attitudes, as evaluations, may be either positive, or negative, depending on whether these criteria are met (Roe & Ester, 1999). Since attitudes represent the application of one or more values in a specific

context, Rokeach (1968, 1973) concluded that the number of attitudes must far surpass the number of values that an individual holds.

To illustrate, consider the difference between the value 'loyal', which is included in the Schwartz Value Survey (Schwartz, 1992) and the work attitude of organizational commitment, of which much has been written. One who values loyalty can be said to believe that loyalty is a preferable mode of conduct to disloyalty. If the individual places loyalty high in the hierarchy of his or her value system, then it is likely that he or she will form an attitude of commitment to his or her employing organization.

2.2.2 Values and Social Norms

Social norms refer to relatively precise rules specifying behaviour that is appropriate in specific situations (Teevan, 1989). As we have seen, values pertain to both behaviour and end-states of existence and are transcendental, not related to specific situations or contexts. Rokeach (1973) notes that values are personal and individualized, whereas norms apply uniformly to broader publics. Furthermore, norms are external to the individual and are consensual in nature, while values are internalized and vary between individuals and groups (Rokeach, 1973).

2.2.3 Values and Traits

There is little empirical or theoretical evidence regarding the relationship between values and personality traits (Bilsky & Schwartz, 1994). The little

literature that does exist suggests that values differ from traits in two important ways. First, the two constructs are expressions of different levels of conceptual depth. That is, traits describe dispositions toward certain behaviours, while values represent the deeper beliefs that underlie behaviour. Trait theory more or less accepts behaviours at face value and seeks to identify patterns of behaviour and use those patterns to describe people who exhibit them. For instance, a person who behaves positively towards others consistently could be said to possess the trait of 'friendliness.'

Values theory, on the other hand, looks deeper in an attempt to determine the beliefs that motivate specific behaviours. People are not generally described or 'labeled' on the basis of their values, but rather on the basis of the ways in which they display those values through behaviour. Since behaviours are only indirectly related to values, values are not observable, and can only be elicited through the conscious reflection of the subject. In essence, traits are descriptive instruments, while values are more predictive.

The second distinction between values and traits pertains to their origins and their relative stability. Traits are viewed to be innate human characteristics that are fairly fixed and not amenable to change based on experience or situation (Allport et. al., 1960). They are stable components of personality that are entrenched early in life and are not logically or rationally constructed, being determined at least partially by genetics. Although there has been little research conducted on the origins of values and how inter-individual value differences

emerge (Roe & Ester, 1999), and despite moderate findings of genetic influences on values (Keller et al., 1992), most theorists agree that values are acquired primarily through processes of learning, experience and socialization (Rokeach, 1968, 1973; Locke, 1976; Dose, 1997; Krau, 1987; Judge & Bretz, 1992).

2.2.4 Values and Interests

A distinction must also be made between the concepts of values and interests. Rokeach (1973) noted that these two concepts share much in common, and are therefore often confounded. The key distinction is, once again, the differing degree of transcendentalism between the two concepts. Values, as noted repeatedly above, apply to life in general. Interests, on the other hand, represent “a favourable or unfavourable attitude toward certain objects or activities” (Rokeach, 1973: 22). Super (1995) defined interests as “the activities within which people expect to attain their values and thus satisfy their needs” (p. 54). Interests can thus be viewed as more closely related to action or behaviour than are values. As such, interests are closely related to attitudes and goals as situation- or object-specific expressions of values. Dawis (1991) stated that interests are less specific than attitudes, but more specific than values. They represent a middle-ground concept that expresses an individual’s preference for general types of activities, rather than abstract modes of conduct or end-states or specific objects or behaviours. Roe and Ester (1999) noted that while the line of demarcation between values and interests is not always easy to draw, “unlike

values, interests are typically not shared socially within larger communities” (p. 4).

2.2.5 *Values and Needs*

A final theoretical distinction must be made between values and needs. The concept of needs has been explored extensively in the motivation literature as a key determinate of human behaviour (e.g. Maslow, 1943; McClelland, 1966; Alderfer, 1972; Herzberg et al., 1959). Needs refer to the “objective requirements of an organism’s survival or well-being,” which exist whether the organism is conscious of them or not (Locke, 1976: 1303). They are distinguished from values, which are subjective and cognitively constructed. Locke (1976) noted that all people share the same basic needs, while values can and do differ between individuals.

Many theorists have argued that values serve as the cognitive expression of *human* needs (e.g. Super, 1973, 1995; Locke, 1976; Dawis & Lofquist, 1984). The word ‘human’ is italicized here to emphasize the fact that humans are the only animals capable of having values (Rokeach, 1973). This is because values, as mentioned earlier, have a cognitive element, and are not merely instinctual or inborn. Schwartz and Bilsky (1987) posited that values are the cognitive representations of all levels of needs, ranging from biologically based needs (akin to Maslow’s (1943) physiological and safety needs and Alderfer’s (1972) existence needs), to social interactional needs (c.f. Maslow’s (1943) need for

belongingness, Alderfer's (1972) relatedness needs and McClelland's (1966) need for affiliation) to social institutional needs for group welfare and survival.

This link between needs and values is obscured in the literature in reference to higher-order needs (such as Maslow's self-actualization need and Alderfer's growth need). Since higher-order needs are unique to human beings, and require cognition in order to be realized, they come dangerously close to the concept of values as it has been described above. Notably, McClelland's (1966) famous trio of learned needs (n Ach – the need for achievement, n Aff – the need for affiliation, and n Pow – the need for power) are very difficult to distinguish from values. In fact, achievement, power and friendship are all incorporated as values in the Schwartz Value Survey (Schwartz, 1992).

The clearest means of discerning values from needs comes from the requirement of cognitive reflection that is tied to values. As cognitive representations of needs, values are "exclusively a product of consciousness;" (Erez et al. 1993: 98) representing the sense-making devices that humans employ in thinking about and acting on needs. While all organisms have needs, humans are the only species that think about these needs in an abstract sense and take thoughtful action to meet them. Regardless of the level of the needs that they represent, values exist within the realm of consciousness as abstract reflections on the needs that drive us. As will be discussed in greater detail in following sections, the cognitive transformation of needs into abstract values is essential to the process of devising and taking action to meet those needs.

2.3 The Content and Structure of Values: A Review of the Major Theories

A central tenet in the theory of general values is that values are organized into a system, rather than being a disparate collection of unrelated beliefs.

Because we employ multiple values simultaneously in making decisions about how to behave (Liedtka, 1989; Ravlin & Meglino, 1989), there is little utility in studying specific values in isolation. Values researchers appreciated this early on, and have thus sought to understand the way in which values interact to produce a final effect. This section examines the major theoretical contributions that have been made in the understanding of human values and how they interrelate.

2.3.1 Gordon Allport's (1960) Values Typology

Early efforts to understand values focused on the development of typologies of value content. Among the first writers to devise such a typology was personality psychologist Gordon Allport. Allport, building on the work of psychologists Carl Jung and Erich Fromm, believed that human beings require a unifying philosophy that provides meaning to one's life and helps explain the tragedy of suffering and death (Ewen, 1993). Based on the ideas of German philosopher Eduard Spranger, Allport, Vernon and Lindzey (1960, originally published in 1931) devised a classification of important values (or value-orientations). Six types of values were proposed:

- Theoretical:** The intellectual drive to discover truth and systematize one's knowledge;
- Economic:** A businesslike concern for the useful and practical;
- Esthetic:** An emphasis on the enjoyment of beauty, harmony, form and the artistic, for its own sake;
- Social:** Concern for and love of other people;
- Political:** A desire for power or authority;
- Religious:** A mystical desire for unity with a higher reality.

Allport and his colleagues believed these values to be universal, applying to people in general. Yet the expression of these value types was expected to differ across individuals. According to this theory, certain value types may be more apparent in one individual than another, to differing degrees within individuals, and may be entirely absent from some people.

Allport and his colleagues (1960) made an indelible contribution to the study of values by being the first to propose a systematic representation of the concept. Their typology provided a theoretical representation of the content of the human values spectrum that served as a useful starting point for future research. They were also the first researchers to evaluate the values construct through empirical research. Their *Study of Values* (Originally published in 1931) had respondents rank their preferences to the six pre-established value orientations to reveal the relative importance of the value orientations to the individual. The ranking method of values measurement has since been employed on numerous occasions by other researchers (e.g. Rokeach, 1973; Ravlin & Meglino, 1987, 1989; Braithwaite & Law, 1985; Gibbins & Walker, 1993).

2.3.2 Kluckhohn's (1951) Dimensions of Values

Kluckhohn (1951) argued that classifications of values that are merely content-based, such as that of Allport et. al. (1960) are limiting in their generalizability. In opposition to the notion of universality put forth by Allport and his colleagues, Kluckhohn (1951) argued that values are culture-bound, and thus vary between societies. He expanded the theoretical underpinnings of values beyond mere content by proposing a depiction of values including six other dimensions, as follows:

- 1) Modality – the division of values based on whether they are positive (good, virtuous) or negative (bad, vices);
- 2) Content – the division of values based on their content (similar to Allport's classification);
- 3) Intent – the division of values based on whether they pertain to a mode of behaviour (*mode* values), means to further ends (*instrumental* values), or ultimate ends of existence (*goal* values);
- 4) Generality – the division of values based on whether they are applicable in limited social circumstances (*role* values), or to a wide variety of situations and cultural contexts (*thematic* values);
- 5) Intensity – the division of values based on the degree to which individuals adhere to them. *Categorical* values are taken as given – as “musts” or “must nots.” *Preferential* values are those which are considered to be more a matter of individual choice, violations of which are not considered to be inherently wrong. Similarly, one could contrast *central* and *peripheral* values based on the number and variety of behaviours influenced by the value.
- 6) Extent – the division of values based on the number of people that hold the value, ranging from *idiosyncratic* values, held by only one individual, to *group* values, which are

held by a specific group or culture, to *universal* values that are held by all of humanity;

- 7) Organization -- the division of values based on their importance, relative to other values. *Priority* values tend to be the more general values that contribute to the coherent organization and functioning of the entire value system. Values are not independently arranged in a linear hierarchy, but are interrelated and arranged in clusters.

In offering this “tentative” (p. 413) classification of values, Kluckhohn provided insights into the various dimensions of values, and brief comment on the way that values are organized. While this classification may have revealed some key notions about the nature of values, and was influential to subsequent theorists (specifically Rokeach), it is not widely cited in the extant literature. Perhaps this is because it left many questions unanswered, such as how the proposed dimensions overlap and combine and which dimensions are important in understanding how values are constructed and translated into action. Furthermore, Kluckhohn did not discuss how this classification might be applied to study the values of a specific individual or put to use to guide behaviour.

Despite the limitations of Kluckhohn's (1951) total dimensional conceptualization of values, some of the individual dimensions have been incorporated by subsequent researchers. For instance, Locke (1976) noted that values have content, intensity and relative importance, corresponding to three of Kluckhohn's dimensions. Elizur (1984, 1994, 1996) included modality as a key facet in his work. Elizur and Sagie (1996, 1999) included facets called *focus* and *life area*, roughly corresponding to Kluckhohn's (1951) generality and

organization dimensions, respectively. A number of Kluckhohn's dimensions are evident in Rokeach's (1973) conceptualization, notably those of intent, intensity and extent. Thus, while Kluckhohn's work did not receive widespread acceptance as a self-contained explanation of values, the impact of his ideas on subsequent researchers is undeniable.

2.3.3 Rokeach's (1973) *Nature of Human Values*

As mentioned previously, the seminal modern work on human values was psychologist Milton Rokeach's *Nature of Human Values* (1973). In this oft-cited work, and a series of other works that followed, Rokeach built on the work of Allport and Kluckhohn to devise a more comprehensive theory of the nature of values and their interrelation, and devised a more robust methodology for measuring values that is utilized to this date. Central to Rokeach's conception of values is the distinction (noted above) between *instrumental* values – beliefs about a mode of conduct – and *terminal* values – beliefs about an end-state of existence. Rokeach viewed these two types of values as separate, yet functionally related, wherein “the values concerning modes of behavior are instrumental to the attainment of several terminal values.” (Rokeach, 1973: 12) The relationship need not be one-to-one, he asserted, as one instrumental value may relate to multiple end-states, and many instrumental values can relate to a single terminal value. Rokeach (1973) conceded that the line between instrumental and terminal values is sometimes hazy, as even terminal values could be viewed as means to one ultimate end-state, such as perfection.

Nevertheless, he held that it is possible to distinguish between instrumental and terminal values if we conceive of instrumental values as related to behaviours and terminal values to idealized (and perhaps unattainable) end-states.

Rokeach (1973) estimated that human beings hold about 18 terminal values and approximately five to six dozen instrumental values. He argued that the number of end states to which one aspires in life is likely to be much smaller than the numerous modes of conduct that are instrumental to the attainment of those end-states. Since one could take many paths to the same end-state, he argued, there must be more instrumental than terminal values. Based on a review of the literature and empirical evidence from his own studies, Rokeach (1973) identified 36 separate human values that he believed to be universal. The number of terminal values was held to only 18 in his studies to allow respondents to rank them without undue difficulty. These 36 values represent the agglomeration of hundreds of values identified in his research, on the basis of overlap, synonymous nature, and high statistical correlation (Rokeach, 1973: 29). The 36 values are listed in Appendix A.

Rokeach's (1972, 1973, 1979) major contribution to the theory of values is the conceptualization of values as belonging to an organized system within the individual, in which values, once learned, are prioritized relative to other values. Rokeach (1973) argued that instrumental and terminal values exist on two separate, but interconnected hierarchies of priority that coexist to comprise a single value system. According to Rokeach (1973), it is the value system that

enables universal values to express themselves differently in different individuals and social groups, as well as within individuals over time. In other words, to say that two individuals hold different values does not imply the absence of one or more values in one of the individuals, but rather, a different prioritization of the same values for the two individuals. Similarly, a change in one's values over time implies a shift in the priorities of two or more values, while the entire value system remains relatively stable over time. The value system, by virtue of its hierarchical ranking of values, also provides a means by which individuals can resolve conflicts and contradictions between competing values when applied to specific situations.

Almost thirty years after its original publication, Rokeach's work continues to be heavily influential. Rokeach was the first to develop a full conceptualization of human values, and to theorize that values combine in the individual in a comprehensive system of hierarchical priority. Even a cursory review of the literature provides abundant evidence of the continued support for Rokeach's ideas as the basis for a theoretical conceptualization of values. Though criticisms have been raised regarding the methodology through which Rokeach arrived at the 36 values included in his *Value Survey*, (e.g. Braithwaite & Law, 1985; Gibbins & Walker, 1993), the basic tenets of his values theory remain largely unchallenged to date.

2.3.4 *Schwartz's Model of Human Values.*

Schwartz (1994) noted that none of the theory-based classifications of the content of values (i.e. those discussed in the preceding sections) has been widely accepted by researchers. Building on Rokeach's seminal work, Schwartz (1992, 1994) and his colleagues (Schwartz and Bilsky, 1987; Schwartz and Sagiv, 1995; Schwartz, Verkasalo, Antonovsky and Sagiv, 1997; Ros, Schwartz and Surkiss, 1999), proposed a theoretical classification of the content of human values and a model of the structure of the human values domain.

Schwartz and Bilsky (1987) proposed that the aspect most central to any given value is the motivational need that it expresses. This corresponds to the notion, discussed earlier, that values represent the cognitive manifestation of human needs (c.f. Rokeach, 1973, Locke, 1976). Accordingly, Schwartz and Bilsky (1987) reasoned that values must represent the conscious expression of three universal needs to which people seek to satisfy: the physiological needs of humans as biological organisms; the need for coordinated social action; and the survival and welfare needs of groups. The researchers then devised eight distinct types of values that they felt to be cognitive manifestation of these basic needs. The model also examined the dynamic relationships between the various value types. Schwartz (1992) reasoned that "actions taken in the pursuit of each value type have psychological, practical and social consequences that may be compatible or may conflict with the pursuit of other value types" (p. 4). As such, the values structure was portrayed as a series of continua of competing values,

emanating in opposite directions from the centre of a circle like pieces of a pie, with compatible values adjacent to one another (see Figure 2.2).

The results of Schwartz and Bilsky's (1987) empirical testing of these value types in seven countries using the Rokeach Values Survey allowed Schwartz (1992, 1994) to refine the theoretical framework to correspond to the empirical findings. Schwartz (1992, 1994) thus modified the theory, proposing 10 distinct types of values. Table 2.1 outlines the 10 value types, along with brief descriptions of each and the set of individual values that comprise each type. It is Schwartz's (1994) assertion that this classification is exhaustive; it is possible to classify virtually any conceivable individual value into one of these ten value types.

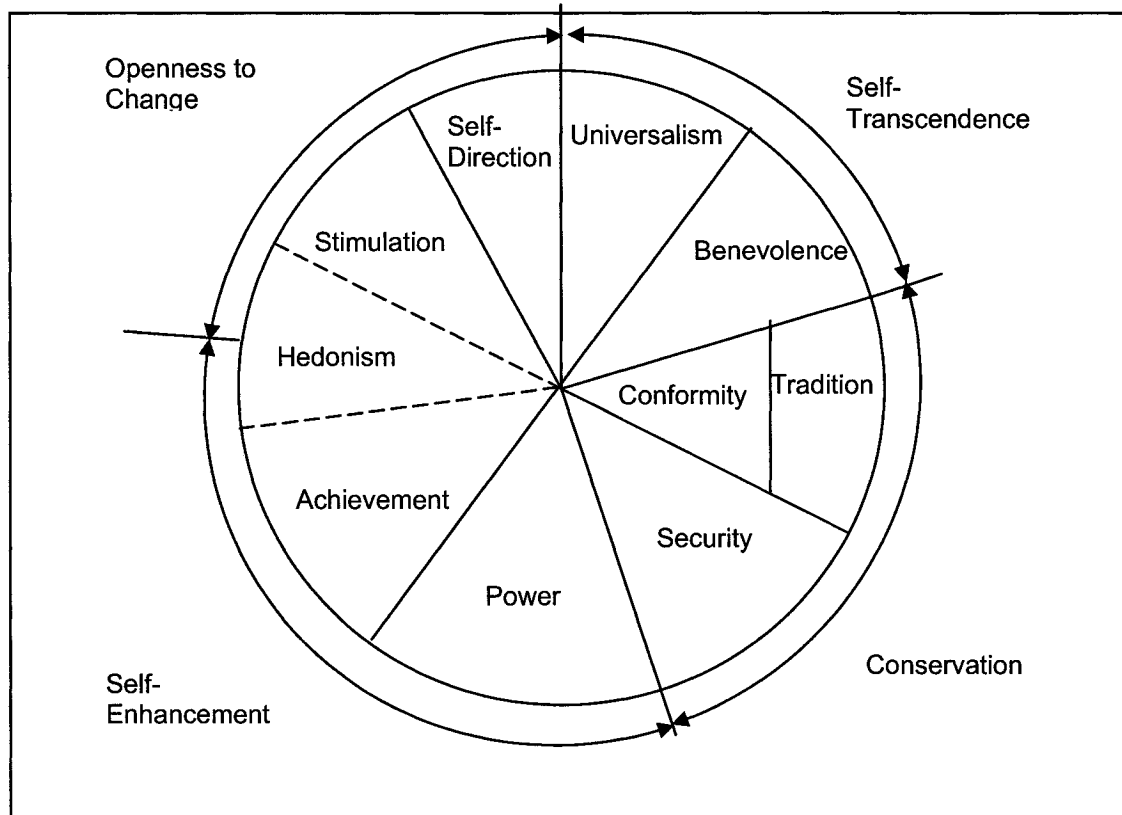
As can be seen in Figure 2.2, the value types are arranged such that opposing values appear opposite each other in the circle. For instance, achievement is contradictory to benevolence, and thus appears opposite it. The location of tradition outside of conformity indicates that these two values share a single motivational goal, corresponding to the "subordination of self in favour of socially imposed expectations" (Ros et al., 1999, p. 51). Congruous values are located within close proximity to one another in the circle, and can therefore be grouped into four higher order value domains, which form two continua of

Table 2.1: Definitions of Value Types (Schwartz, 1992)

Value Type	Definition	Single values that represent it
Power	Social status and prestige, control or dominance over people and resources	Social power, authority, wealth
Achievement	Personal success through demonstrating competence according to social standards	Successful, capable, ambitious, influential
Hedonism	Pleasure and sensuous gratification for oneself	Pleasure, enjoying life
Stimulation	Excitement, novelty and challenge in life	Daring, a varied life, an exciting life
Self-Direction	Independent thought and action – choosing, creating exploring	Curious, creativity, freedom, choosing own goals, independent
Universalism	Understanding, appreciation, tolerance, and protection for the welfare of <i>all</i> people and for nature	Protecting the environment, broad-minded, a world of beauty, social justice, wisdom, equality, a world at peace
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact	Helpful, honest, forgiving, loyal, responsible
Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide	Accepting my portion in life, devout, humble, respect for tradition, moderate
Conformity	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms	Obedient, honouring of parents and elders, politeness, self-discipline
Security	Safety, harmony, and stability of society, of relationships and of self	Clean, national security, reciprocation of favours, social order, family security.

opposing values. The dimension of self-transcendence versus self-enhancement represents the opposition between values favouring equality and concern for the well being of others and those of the pursuit of success, dominance over others and pleasure, irrespective of the welfare of others (Schwartz, 1997, p. 5). The second dimension, openness to change versus conservation represents the conflict between values emphasizing change and independence in thought and action with those favouring “submissive self-restriction, preservation of traditional practices, and protection of stability” (Ros et al., 1999, p. 51). The dashed lines around the value of hedonism signifies that it incorporates elements of both self-

Figure 2.2: The Schwartz Model of Human Values



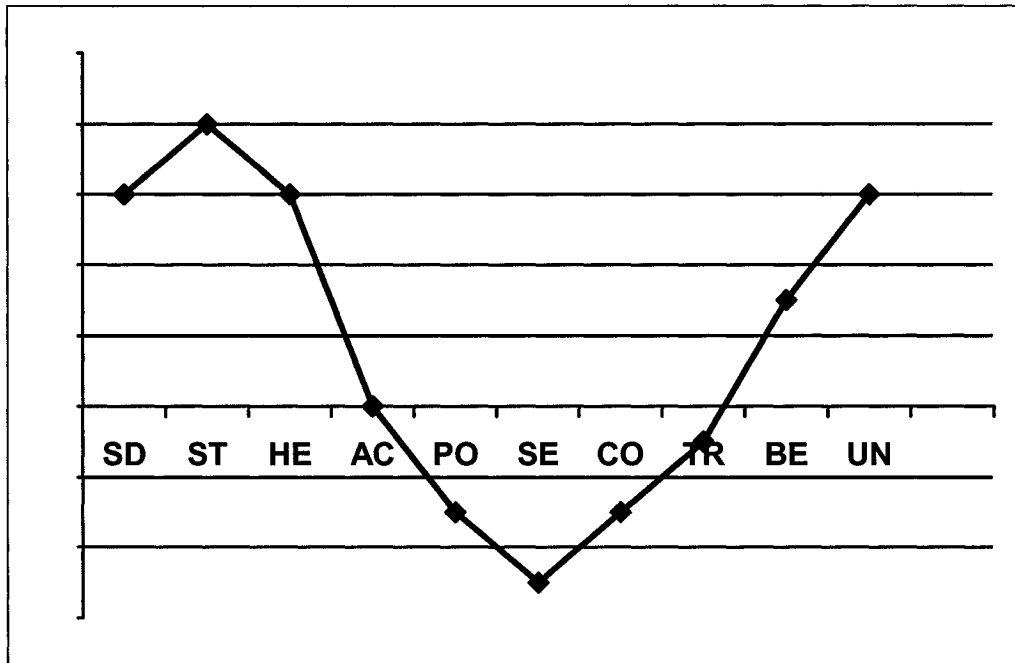
enhancement and openness to change, and is therefore categorized in both higher-order value types.

Schwartz (1997) argued that because this higher-order dimensionality was found in 95% of samples he had studied in 41 different countries (see Schwartz, 1994), the basic structure of values based on these dimensions (see Figure 2.2) can be used to predict relationships of the various value types to outside variables. Specifically, an outside variable that is associated with one value type will be similarly associated with adjacent value types and will display much weaker or opposing relationships with sequentially distant value types. For example, if risk-taking behaviour were found to be correlated to the value type

stimulation, it would also be likely that similar correlations would be found with the value types self-direction and hedonism and that lower correlations or negative correlations would be found with opposing value types such as security tradition and conformity. This pattern of associations in the correlations of value types with outside variables, when plotted in the theoretically proposed sequential order of the values, generates a sinusoid curve, similar to the one shown in Figure 2.3 (Schwartz, 1992, 1994, 1996). Schwartz (1996) found such patterns of correlations to be evident in three studies involving the relationship of values to voting behaviour, interpersonal cooperation and readiness for contact with people of other cultures. This finding suggests that the Schwartz model has utility beyond the basic value types, as it allows research hypothesis to be generated on the basis of the entire values structure (Schwartz, 1996).

The Schwartz model has been subjected to extensive empirical testing through the use of multidimensional scaling techniques and both the ten-value structure and the bi-polarity assumption have been supported by the analyses of 155 samples in 55 different countries (Ros et al., 1999). The Schwartz model adds a useful element to the theory of human values as Schwartz and his colleagues have theoretically derived and empirically validated the content of human values. The model is unique in having provided not only a content model of values, but a structure of conflicts and compatibilities between the various types of values. This allows subsequent researchers to focus not only on isolated values, but to generate and test hypotheses about the entire set of value types.

Figure 2.3 Correlations between Value Types & Outside Variable



The Y-axis values represent bivariate correlations between the values types and some hypothetical independent variable. The X-axis categories are the 10 value types in the order in which they appear in Schwartz'a value structure, Self-direction (SD), Stimulation (ST), Hedonism (HE), Achievement (AC), Power (PO), Security (SE), Conformity (CO), Tradition (TR), Benevolence (BE) and Universalism (UN)
Based on Figure 6 in Schwartz, 1992, p. 55.

2.4 Summary

This chapter has provided a general overview of the concept of human values. While it is recognized that this overview has been somewhat narrow, it has laid out the conceptualization of values that serves as the basis for the present research. In summary, human values operate as follows: over the course of our lives, through our experiences, education, socialization and general interaction with groups, individuals and society at large, we accrue a system of beliefs about what is true and false, good and bad, beautiful and ugly, virtue and vice, et cetera. The most subjective of these beliefs, regarding the desirability of

various ways of behaving and end-states of existence are our values. These values give cognitive expression to all of our needs, ranging from the most basic physiological needs to high-order esteem-fulfillment needs.

We integrate our values into an overall system of hierarchical priority, in which independent values complement and contradict one another in fairly predictable patterns. Our value system allows us to reconcile internal value contradictions to identify the salient value in a certain situation.

The relationship between values and action is not direct, as values have their impact through mediating psychological constructs, such as goals and attitudes. We apply our value system in specific contexts to define goals for which actions can be prescribed. We act to achieve these goals in expectation of meeting the underlying needs represented by our values. While it may appear that individual values change over time, it is more likely that the priority of values within the overall value system have been reordered.

The content and dimensionality of the values domain has been the subject of much theorizing. Although there is no consensus among theorists as to the structure of human values, Schwartz's (1992) model has gained prominence in recent years and has proven robust in research in several countries. Schwartz's model proposes ten universal values that are related to each other through various proximal and oppositional relationships. The ten values can be aggregated into two sets of opposing dimensions: self-transcendence versus self-enhancement and openness to change versus conservation.

3 *Work-Related Values*

Having examined the nature of human values, it may seem logical that moving to a discussion of work values would be an incremental undertaking. However, this could not be further from the truth. In fact, the studies of work values and general human values suffer from a disheartening degree of disunion (Schwartz, 1992; Ros et al., 1999; Elizur and Sagie, 1999). Rather than emerging as a specialized area of the broader human values research, the study of work values has by and large developed as a separate research field. Work values research has been undertaken by a wide range of researchers with differing perspectives and motivations and using different methodologies than general values researchers. This has resulted in the fragmentation of research on the various values domains that has only recently been addressed with attempts at consolidation (Ros et al., 1999; Elizur, 1996; Elizur and Sagie, 1999). Thus, the preceding discussion of general values is a necessary basis for an exploration of work values, but it is hardly sufficient, given the vast body of work that has amassed concerning the work values concept. This chapter reviews the literature on work values, exploring the various ways that work values have been defined and conceptualized, as well as their proposed relationship to the broader realm of general values. This discussion serves as the basis for a definition and conceptualization of work values relevant to the context of the present study.

3.1 The Relevance of Values to the Study of Work

The introduction of values into the study of work can be traced back roughly to the age of the human relations movement, following the seminal Hawthorne studies of the late 1920s. It was then that organizational theorists began to look past working conditions and fundamental human drives as predictors of work behaviour to psychological bases for human motivation - a process Nord, Brief, Atieh and Doherty (1990) referred to as the '*psychologization of work.*' Dawis (1991) noted that the advent of psychological self-report testing and correlation analysis freed researchers from their reliance on experimental research and allowed them to focus on more abstract constructs such as attitudes, interests and values. At the same time, the work of Allport and his colleagues in the 1930s provided a readily available measure of values that had the potential to be used within the specific domain of work.

Although the attention of early applied psychologists was focused on the more tangible construct of *interests* (Dawis, 1991), by the 1960s, researchers began to investigate the role of values in the work setting as a means of understanding the judgment criteria underlying specific interests (e.g. Schwarzweller, 1960; Simpson and Simpson, 1960). It was around this same time that Max Weber's Protestant work ethic concept was first introduced into the realm of psychology as a values component of motivation theory (Furnham, 1990). The 1970s saw an increase in work values research, fueled by the development of a number of work values measures such as Super's (1970) Work

Values Inventory, which could be easily administered and correlated to work outcomes.

Values have since come to take an important role in the study of work outcomes on a number of fronts. First, values have been employed extensively in understanding vocational choices, such as the choice of an occupation (c.f. Rosenberg, 1957; Schwarzweller, 1960; Simpson & Simpson, 1960; Super, 1973; Dawis and Lofquist, 1984; Judge & Bretz, 1992) and employee turnover (Steers and Mowday, 1981). Second, values have been seen to play an integral role in motivation, which has been a central concern in the study of management for decades (Locke, 1976, 1991; Blood, 1969; Kidron, 1978; and Knoop, 1994). Third, values have been utilized as a key component in understanding differences in the work experiences of different demographic groups. For instance, Hofstede (1980) used values as a key construct in his investigation of culture's impact on employee behaviour and beliefs in 40 different countries. Cultural differences have also been investigated by Lebo, Harrington and Tillman (1995), Baguma and Furnham (1993), and Furnham et al. (1993). Research has also been conducted to examine value differences related to age (Taylor and Thompson, 1976; Ronen, 1978; Cherrington, Condie & England, 1979; Smola and Sutton, 2002), gender (Manhardt, 1972; Elizur, 1994; Abu-Saad and Isralowitz, 1997, Mason, 1994), blue-collar versus white collar work (Pennings, 1970; Dickson & Buchholz, 1977) and union membership (Hovekamp, 1994).

Because values are so central to understanding personality and human behaviour, they hold the potential to tell us a great deal about many other topics in organizational behaviour, including leadership, group dynamics, power and politics, decision making, and of course, organizational culture. A general understanding of the way in which values are constructed, and the types of value orientations that are present in the workforce would prove an invaluable tool to managers and researchers in understanding and dealing with differences between individuals and social groups. It is the potential for such discovery that has fueled an ever-growing interest in human values as a management variable.

3.2 Work Values and General Values

While it has made intuitive sense for theorists and researchers to apply the values concept to the realm of work activity, this transposition has not been theoretically easy, and the result has been a great lack of consensus regarding the way in which basic human values enter into the work domain. Although a small number of researchers (e.g. Ronen, 1978; Schwartz, 1999; Ros et al., 1999) have examined the impact of general life values in the domain of work activity, researchers have generally treated work values as a construct that is discrete from general values (Elizur and Sagie, 1996, 1999; Roe & Ester, 1999). Thus, the concept of work values has largely developed in isolation of the general values research, mainly through empirical operationalizations of isolated work-related psychological constructs (Ros et al., 1999). The empirical roots of

work values research stand in contrast to the theoretical origins of the general values literature (Dawis, 1991). Given the divergent origins of these two fields of research, it is understandable, yet unfortunate, that a theoretical schism continues to exist between them.

It is generally accepted, though seldom explicitly stated, that work values are intimately connected to general life values; yet the nature and causality of this relationship is the subject of some debate (Roe & Ester, 1999). The main point of contention is whether work values are a derived subset of general life values, or an altogether separate construct that is related to, but not directly derived from general life values. Each of these positions is explored in the following sections.

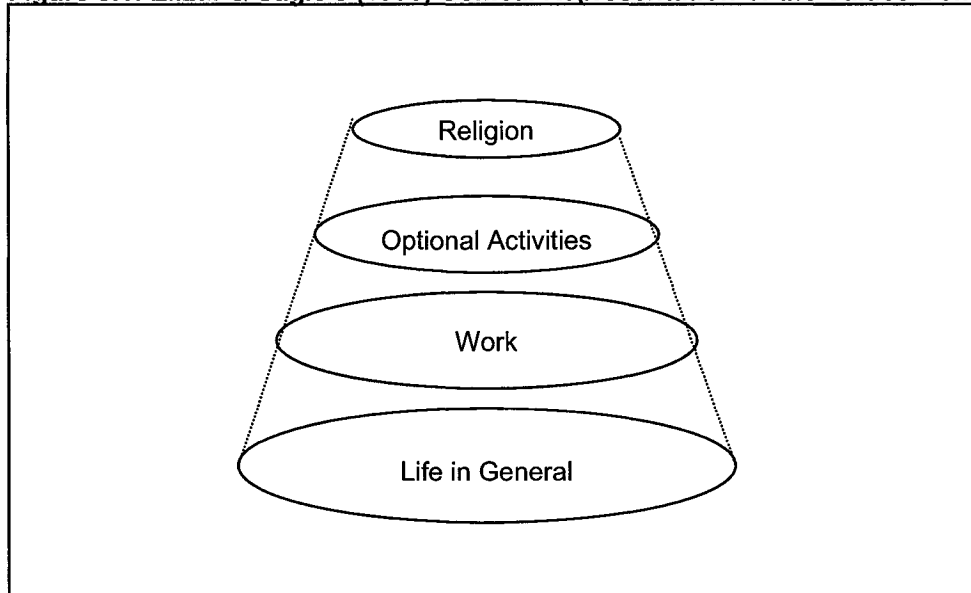
3.2.1 Work and General Life Values as Separate Constructs

One hypothesis is that work values represent a distinct set of beliefs within a specific domain of life that may or may not be correlated with general life values. This notion was theorized and empirically tested by Elizur and Sagie (1996, 1999), who used a multidimensional scaling approach called smallest space analysis (Guttman, 1968) to map general and work values in three-dimensional geographical space. This technique allowed the researchers to express a set of value items from a variety of life domains as points in geometric space. The distances between the points correspond to the size of correlation coefficients, such that highly similar items are close to one another geometrically.

In effect, this technique provides a three-dimensional picture of the overall values domain that can be analyzed for identifiable regions of similar values. Their research indicated that work values occupied a distinct vertical layer, which was separate from the domains of optional activities (culture, sports and politics) and religion (Elizur & Sagie, 1996) and from general life values (Elizur & Sagie, 1996, 1999). In three-dimensional space, the total values domain was found to have a conical structure, with the various values domains occupying separate layers of varying sizes. As seen in Figure 3.1, the broadest layer of the values structure was found to be that containing values pertaining to life in general. The values domains of work, optional activities and religion were found to represent increasingly narrower layers of the overall conical structure.

Elizur and Sagie's (1996, 1999) findings support the hypothesis that work values occupy a distinct level of values in the overall values domain; one that is separate from, but related to other domains of existence. While the work of Elizur and Sagie recognizes that a relationship exists between work and general values, it does not explore the nature or causality of this relationship in detail.

Figure 3.1: Elizur & Sagie's (1996) Conical Representation of the Values Domain



3.2.2 Work Values as a Subset of General Life Values

A second hypothesis is that work values represent a subset of general life values that are pertinent to the realm of work. This hypothesis argues that there is only one set of overarching values, and that these values manifest themselves in the various domains of our existence. Those researchers subscribing to this hypothesis have not sought to define a distinct set of work values per se, but have instead applied sets of general values to the domain of work. The implication of this second hypothesis is that measures of general life values are useful in understanding and predicting people's behaviours and decisions in the work setting.

For instance, Ros, Schwartz and Surkiss (1999) argued, "From the viewpoint of the theory of basic human values, work goals or values are specific expressions of general values in the work setting" (p. 54). Ronen (1978) argued

that "in the investigation of the relationships between values and job attitudes, the scope of values to be considered should be broadened from the narrow realm of work values to the broader one of basic human values" (p. 81). Other researchers have defined work values simply by adding a reference to the domain or experience of work to their existing definitions of general values (e.g. Meglioni & Ravlin, 1998; Judge & Bretz, 1992; Sverko and Vizek-Vidovic, 1995).

Ros, Schwartz and Surkiss (1999) provided empirical evidence to corroborate the subset hypothesis. The researchers found Schwartz's (1992, 1994) four high-level value types (see Figure 2.2) to be positively correlated to four types of work values discussed in the work values literature: intrinsic, extrinsic, prestige and social or relational values³. Specifically, they found that:

- intrinsic work values (such as interesting and varied work) were positively correlated with openness to change values (self-direction, stimulation and hedonism),
- extrinsic work values (such as salary and working conditions) were positively correlated to conservation values (conformity, tradition and security),
- social work values (such as working with people and contributing to society) were positively correlated to self-transcendence values (universalism and benevolence), and
- prestige-related work values (such as authority and prestigious work) were positively correlated to Self-enhancement values (hedonism, achievement and power).

³ A more detailed discussion of work values types is provided later in this chapter.

Furthermore, multidimensional scaling through smallest space analysis verified the existence of four distinct work values types among the 10 work values items they tested, corresponding to the types they had proposed a priori (intrinsic, extrinsic, social and prestige).

The overall results of Ros et al.'s (1999) research supported their hypothesis that work values are expressions of basic individual values in the work setting. The correlation of the work values to Schwartz's (1992, 1994) general values structure provides a useful theoretical link between general and work values. However, the limited number of work values items employed in their study necessitates further research to examine other possible work value types and their connection to the general value structure.

3.2.3 Other Views on Work Values and General Life Values

The two hypotheses described above represent polar ends of the spectrum. The majority of work values research that has been conducted falls in the hazy mid-ground, treating work values as a separate construct from general values, but recognizing (often implicitly), that the two are causally related in some way (Roe and Ester, 1999). The common assumption is that work values are derived from general values, though very few researchers have contemplated the precise nature of this causal relationship (George & Jones, 1997; Roe and Ester, 1999). Those rare studies that have measured both have found the two to be strongly correlated (Elizur and Sagie, 1996, 1999). Some researchers have

suggested that general values may emanate from work values to some degree (e.g. Roe & Ester, 1999), though there are obvious limits to this causality, as not all people are engaged in the activity of work, nor are they engaged in the activity of work in the early years of life when values are presumed to form.

Nonetheless, given the centrality of the work domain to the lives of most adult individuals, it is likely that experiences in the workplace contribute to the learning of new values and value orientations to some degree.

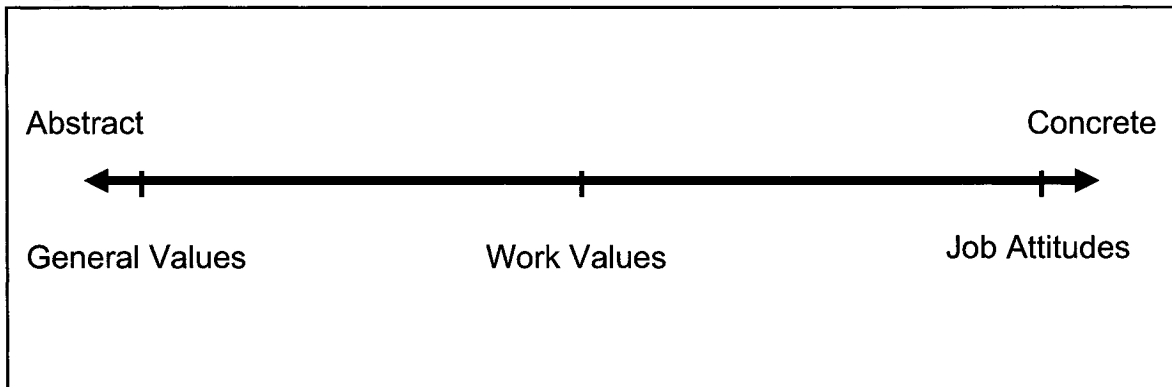
3.2.4 *The Values – Attitude Continuum*

If one concedes, as Elizur and Sagie's (1996, 1999) research indicates, that work values are indeed a separate and distinct construct worthy of research, then it becomes necessary to situate this concept within the nomological network of values and attitudes as previously defined. According to Rokeach (1973), a key factor differentiating values from attitudes is that values are transcendental, while attitudes are targeted at specific objects. Given this distinction, one might argue that work could be construed as an *object* to which various values are applied to form attitudes. Yet, as noted earlier, attitudes are generally considered to apply to concrete objects in a situational context (Rokeach, 1973).

The concept of *work attitudes* is well defined in the organizational behaviour literature as cognitive and affective assessments of specific targets such as one's job (job satisfaction and job involvement), organization (organizational commitment), or occupation (occupational commitment) (George

and Jones, 1997; Steers and Mowday, 1981; Blau, 1989). In investigating the conceptual space occupied by work values, we propose that values and attitudes be viewed not as a dichotomy, but as the anchor points on a continuum representing the level of abstractness of the objects to which they pertain. As shown in Figure 3.2, at one extreme lie general values, which are beliefs about end states of existence and general modes of conduct (Rokeach, 1973) that are not bound to any specific time or place. At the other extreme lie attitudes, which represent affective and cognitive evaluations of specific objects in a specific situation. What is needed is a middle ground construct that represents psychological assessments of abstract objects, a broader class of objects that are related to a specific domain of existence, but not bound to specific situations. It is our suggestion that the concept of work values represents such an assessment applied to the domain of work. This is in keeping with the typology of values proffered by Meglino and Ravlin (1998), which distinguished between values held by individuals (such as those proposed by Rokeach), and "the type of value that one places on an object or outcome (e.g. the value one places on pay)" (p. 353).

Figure 3.2: The Values – Attitude Continuum for Work



This second type of value, when applied to objects and outcomes related to work, constitutes the conceptualization of work values described above in Figure 3.2, as assessments of abstract objects within the domain of work activity. To clarify, the *value* placed on an object such as work is distinct from an *attitude* toward an object, as an attitude expresses one's liking or disliking of an object, while a value expresses an underlying judgment criterion that is employed to determine the importance of an object to the individual. For example, one who values wealth is likely to value high salaries in the work domain and is therefore likely to have a positive attitude toward jobs that provide high salaries.

The basic distinction made in Figure 3.2 provides a means of envisioning work values as a concept within the nomological network of values and attitudes. However, as will be seen in the sections that follow, work values have been envisioned in a number of ways that span the proposed continuum between basic values and attitudes. In reality, rather than producing a single homogeneous concept, the work values literature has generated a number of

different but related concepts pertaining to work. The following sections explore the wide variety of perspectives that have contributed to the broad body of literature that falls under the purview of work values.

3.3 Conceptions of Work Values in the Literature

The study of work values not only suffers from a disconnection from the study of basic human values, but also from extreme fragmentation of the concept itself. The body of literature falling within the ambit of work values is diverse and far-reaching, emerging from across the social science disciplines. Unfortunately, very few authors have ventured to integrate the divergent perspectives on work values to elicit a holistic understanding of the work values concept (Dose, 1997; Roe and Ester, 1999). In fact, authors writing from a given perspective seldom make an effort to acknowledge or build on the work of those from other perspectives. In the introduction to a special journal issue dedicated to the topic of work values, Roe and Ester (1999) argued, "In view of the differences between the various studies, it is clear that an immediate integration of concepts and findings is not achievable. What seems possible, however, is to design a framework model that enables one to group and connect the conceptual models of the diverse research projects" (p.10).

Such a framework was proposed by Dose (1997), who identified four main streams contributing to the broadly construed work values literature, all involving different contributors and emerging from different research traditions (See Table

Table 3.1 - Dose's (1997) Typology of Work Values Foci

<u>Work Values and Vocational Behaviour</u> <ul style="list-style-type: none"> ▪ Super (1973) Vocational Work Values ▪ Lofquist and Dawis's (1984) Theory of Work Adjustment ▪ Pryor's (1979) Work Preferences 	<u>Significance of Work</u> <ul style="list-style-type: none"> ▪ Weber's (1958) Protestant Work Ethic ▪ Nord, Brief Atieh & Doherty (1988, 1990) Meaning of Occupational Work ▪ Meaning of Working Study (MOW) (1987)
<u>Values Concerning Work Behaviour</u> <ul style="list-style-type: none"> ▪ England's (1967) Personal Values Questionnaire ▪ Ravlin & Meglino's (1987, 1989) Behavior Preferences ▪ Locke (1976) Importance of Outcomes 	<u>Business Ethics as a Value System</u> <ul style="list-style-type: none"> ▪ The field of business ethics ▪ Ethical codes of conduct

3.1). Dose (1997) is unique in having provided an overview of the work values literature that includes a wide variety of approaches and conceptualizations. Previous efforts at integration of the work values literature focused more narrowly on subsets of the overall body of literature, while excluding others. For instance, Macnab and Fitzsimmons (1987) provided an integrative investigation of work in the vocational stream of values research, but did not consider the other streams. Similarly, reviews of the literature in the significance of work stream were undertaken by Nord, Brief, Doherty and Atieh (1988, 1990), Meglino and Ravlin, (1998) and Furnham (1984, 1987, 1990).

The inclusive nature of Dose's (1997) typology makes it an excellent starting point for an overview of the divergent work values literature. Three of these major areas of the literature (vocational values research, behavioural values research and significance of work research) will be explored in the sections that follow. The field of business ethics is excluded from this discussion, as very little direct mention of business ethics exists in the work values literature (Dose, 1997). As will be seen, the different approaches to the study of work

values have their roots in a variety of academic disciplines and have evolved in different ways.

3.3.1 *Vocational Work Values*

The most voluminous body of work values literature comes from the area of vocational research. Largely the territory of occupational psychologists, the vocational behaviour research generally aims to explain why and how individuals make important decisions regarding their occupations, careers and jobs. The overarching focus of this research is in motivating employees by ensuring that they are satisfied in their work, which is presumably accomplished by matching people with appropriate jobs, given their skills, interests, preferences and values (Zytkowski, 1973; Dawis, 1991). Dawis (1991) noted that vocational behaviour research developed in conjunction with the broader discipline of applied psychology and the advent of correlation analysis as an applied alternative to experimental research. He argues that while experimental psychologists focused on *drive* as a universal construct in human motivation, applied psychologists, armed with self-reporting measures, ratings scales and empirical analysis, began to focus on individual psychological differences, expressed as *interests*, *values* and *preferences*.

Vocational behaviour researchers have generally preferred an operational definition of the values construct, derived through the development of measures and *a posteriori* factor analysis, rather than through *a priori* theoretical

conceptualization (Dawis, 1991). The result has been a proliferation of overlapping measures each designed to capture the interests and preferences that individuals express for specific work or work environments that affect their job and career decisions (Dose, 1997). Researchers have typically generated lists of work-related items and asked respondents to rate or rank the items according to their importance to the individual. While early vocational measures, notably the *Strong Vocational Interest Blank* (Strong, 1943), focused on individuals' interests, a number of measures were developed in the latter half of the 20th century to capture the more fundamental construct of values (Dawis, 1991). As will be seen below, the vocational perspective assumes that work values can be identified by assessing the importance that individuals place on a variety of work-related items (such as pay, benefits, achievement, etc.) and then analyzing those importance scores to reveal the latent criteria used to make such assessments of item importance. It is thus the categories of items that are important rather than the items themselves.

A wide variety of values measures have been developed within the vocational behaviour perspective, each with a slightly different focus and conceptualization of work values. A discussion of all of these measures is well beyond the scope of the present discussion. Instead, the focus here will be restricted to a small number of measures that have garnered the attention of reviews integrating the work values concept (e.g. Macnab and Fitzsimmons, 1987; Dose, 1997) and those that have particular relevance to the present study.

Specifically, Super's (1973) Work Values Inventory, Dawis and Lofquist's (1984) Minnesota Importance Questionnaire, and Pryor's (1979) Work Aspect Preference Scale are discussed below to reveal the underlying definitions and conceptualizations of work values employed by their designers.

Super's (1970) Work Values Inventory

Among the most widely used measures of work values, Super's Work Values Inventory (WVI) was developed in the 1950s as a means of assessing "the various goals that motivate men to work" (Super, 1973, p. 190). Super envisioned work values as derived from needs, and serving as the objectives or goals that one seeks to attain in satisfying those needs. He defined interests as the more specific activities and objects through which values are expressed in meeting needs (Super, 1973). Super posited that needs are cognitively expressed as values, which are the goals that are attained through the pursuit of specific interests. Since any given value could be attained through more than one type of activity or occupation, interests are necessarily more numerous than values (Dose, 1997). Given the large number of possible interests an individual can have, Super (1973) argued that it is more fruitful to examine values as the standards upon which we determine our interests than to examine the specific interests themselves.

The WVI asks respondents to rate the importance of 45 items reflecting 15 separate work-related values (See Appendix B). The phrasing of the 45 items

reflects Super's view of work values as the intrinsic and extrinsic objectives (or "satisfactions") that one seeks to meet through work or through the outcomes of work. Thus, the items represent various attributes of the work environment (e.g. supervision, co-workers, surroundings), the work itself (e.g. creativity, intellectual stimulation, variety), and the outcomes associated with working, both extrinsic (e.g. economic returns) and intrinsic (e.g. altruism, prestige, way of life). Respondents are asked to rate each item on a 5-point scale anchored by "Very Important" on one end and "Unimportant" on the other.

The items for the WVI were identified through a review of existing research in the areas of values and job satisfaction (Super, 1973). Since the WVI was intended for use with young people in identifying career options, the initial development of the instrument was carried out through interviewing and testing eighth-grade boys. The final version of the WVI has been subjected to testing on a number of samples and has shown acceptable validity and reliability (Super, 1970; Blickle, 2000).

A number of researchers have sought to identify the underlying factor structure of the WVI. O'Connor and Kinnane (1961) found a reduced 30-item form of the WVI, administered to 191 male college students, to exhibit a six-factor structure, consisting of: 1) security-economic-material; 2) social-artistic; 3) work conditions and associates; 4) heuristic-creative; 5) achievement-prestige; and 6) independence-variety. Hendrix and Super (1968) tested the full version of the WVI on a sample of 99 high-school students and found a resultant four-factor

structure: 1) material values - related to extrinsic items such as supervision, economic returns and surroundings; 2) goodness of life - related to intrinsic items such as altruism, aesthetics and achievement; 3) self-expression - associated with occupational activities, such as creativity, variety and intellectual stimulation; and 4) behaviour control - related to the way that work is directed, including items such as independence and management.

Miller (1974) classified the 15 WVI value scales *a priori* into the categories intrinsic and extrinsic in an analysis of the relationship between work values and vocational maturity. Miller (1974) suggested that six scales could be categorized as intrinsic (achievement, altruism, creativity, aesthetics, intellectual stimulation and management) while the remaining eight (associates, economic returns, independence, prestige, security, supervisory relations, surroundings, variety and way of life) could be categorized as extrinsic. Miller did not, however, factor analyze the results to confirm this categorization. More recently, Dagenais (1998) used principal components factor analysis on published matrices contained in Super (1970) to establish a factor structure for the WVI. A two-factor structure emerged that was, on the whole, consistent with the extrinsic-intrinsic dichotomy proposed by Miller (1974). Three scales (independence, variety and achievement) did not conform to the proposed factor structure.

Along with his colleagues on the international Work Importance Study (1980), Super refined the WVI to develop an improved model called the Values Scale (VS), which measures 20 vocational values. The intent of the Work

Importance Study was to develop a set of culturally relevant measures for work. While the VS is the measure designed specifically for the US, a Canadian version was developed, as well as measures for several other countries. The original VS measure consists of 20 sub-scales, each represented by five items. For each sub-scale, three of the five items are meant to be cross-cultural in nature, while the other two are specific to national cultures. Despite the fact that it was intended as a replacement for the WVI, the VS has received significantly less research attention (Dose, 1997).

With the WVI, Super was one among the first researchers to introduce the concept of values into the field of vocational research. The WVI has made an indelible contribution to the study of vocational behaviour, and is arguably the best known measure of values in vocational research (Dose, 1997).

Dawis and Lofquist (1984) Minnesota Importance Questionnaire

The Minnesota Importance Questionnaire (MIQ) was designed as part of the broader framework of the Theory of Work Adjustment (Dawis, England and Lofquist, 1964, revised in Dawis and Lofquist, 1984), which examines the interactions of the individual and his/her work environment. The theory seeks to explain the ways in which individual differences and job differences combine to determine the satisfactoriness of employees in a given environment, as well as the satisfaction of the individual in that job environment. The employee's satisfaction is considered a function of the degree of correspondence between

individual needs and the reinforcer system provided by the work environment. The key psychological construct determining job satisfaction is the needs of the employee that are to be satisfied through working. Within the context of this theory, needs are defined as "preferences for reinforcers expressed in terms of the relative importance of each reinforcer to the individual" (Rounds et al., 1981, p. 8). The term "reinforcers" is meant to refer to specific conditions in the work environment that have the potential to satisfy needs.

As part of its research, the University of Minnesota Work Adjustment Project Team devised a set of measures corresponding to the key constructs of the theory. For instance, job satisfaction is measured through the Minnesota Satisfaction Questionnaire (MSQ) and occupational reinforcers are measured through the Minnesota Job Description Questionnaire (MJDQ). The measure corresponding to individual needs is the Minnesota Importance Questionnaire (MIQ), which incorporates 20 statements corresponding to 20 different occupational needs. Respondents are asked to rank their needs in order of importance in selecting their *ideal* job. Ranking is accomplished in one of two ways, depending on the form of the questionnaire that is used. One form consists of a set of 190 pair comparisons that matches each of the 20 needs against each other exactly once. The other form is constructed as a balanced incomplete block design in which each item is compared against all others exactly once, but in groupings (blocks) of five items.

The current form of the MIQ is a refinement of the original measure, which employs Likert-type rating scales and multiple items scales for each need. After several years of accumulated research data with the original form, the one item that was found to correlate most highly with each of the 20 scale scores was selected for inclusion in the current ranking format (Weiss, 1973). The 20 items included in the MIQ parallel the job attributes measured in the MJDQ.

The Minnesota researchers did not originally integrate the concept of values into their theoretical framework. Later research, however, posited values to be the basic dimensions underlying needs, leading the researchers to describe values as "second-order needs" (Dawis & Lofquist, 1984). Dawis (1991) argued that "values represent common elements in need dimensions and are construed, in the factor analysis sense, as reference dimensions for the description of needs" (p. 838). It is interesting to note that Dawis and Lofquist's conception of needs as more specific manifestations of abstract values is contrary to definitions of needs proposed by other theorists (e.g. Super, 1970; Locke, 1976, 1991), which view needs as the more global construct (Macnab & Fitzsimmons, 1987).

Several factor analyses of the MIQ from different sources have produced a consistent six-factor structure underlying the 20 items (Keller et al., 1992). The six factors are achievement, comfort, status, altruism, safety, and autonomy (refer to Appendix C). Dawis and Lofquist (1984) reported the results of an unpublished multidimensional scaling study conducted by Rounds and Dawis that showed the six resulting values dimensions, when arranged in three-

dimensional space, showed bi-polar pairings in three pairs: achievement versus comfort; altruism versus status, and safety versus autonomy. This bi-polar classification is very similar to Schwartz's model of basic work values (see Figure 2.2). Dawis (1991) noted that the six value dimensions can be divided into three classes of work reinforcers: achievement and autonomy refer to individual reinforcers; altruism and status refer to social reinforcers, and safety and comfort refer to environmental reinforcers. The six-factor values structure has allowed researchers to employ the MIQ as a work values measure by treating the factors as variables and the individual needs items as scales. Keller et al. (1992) argued that "greater weight should be given to the resulting work-value variables than to the MIQ-scale variables because the work-value variables are more dependable than any single MIQ-scale interclass correlation" (p. 85). The full set of needs items and the values which underlie them are given in Appendix C.

Although the MIQ was designed to measure occupational needs as part of a broader theoretical framework of the Theory of Work Adjustment, its consistent factor structure gives it utility as a measure of work values. This property of the MIQ makes it useful from two perspectives. First, it provides concrete data about the specific attributes of jobs that employees seek. Second, it provides more general information about the values that drive those preferences. In this way it provides measures at two conceptual levels. Furthermore, the current forms of the MIQ, which utilize pair comparison and balanced incomplete block designs, provide useful information about the hierarchical ranking of values in terms of

individual importance, while at the same time providing an absolute judgment to counter the difficulties inherent in ipsative ranking measures.

Pryor's (1979) Work Aspect Preference Scale

Unlike many of his contemporaries, Pryor (1979) viewed the concept of work values as poorly formulated and confounding, and proposed that the term "preferences" be employed in its place. Pryor viewed work preferences as a matter of personal choice in job attributes, rather than as beliefs about what is good or what ought to be done in a job, and noted that an individual's moral beliefs (i.e. values) need not necessarily correspond to his/her preferences in the workplace, though they often do (Dose, 1997). He thus defined a work aspect preference as "a statement of the relation between a person (the subject of the relation) and a particular quality of work (the object of the relation). The relationship between the two is that of a greater or lesser liking when the person has the opportunity to make a choice" (Pryor, 1979, p. 254).

According to Pryor (1979), there is no upward limit on the number of work aspects preferences that an individual may hold, as there may be as many preferences as there are work aspects. Nonetheless, Pryor's (1979) measure, the Work Aspect Preference Scale (WAPS), consists of 13 subscales, each of which is represented by four items. Work aspects are rated on a five-point Likert-type scale ranging from "quite unimportant" (1) to "extremely important" (5). The 13 sub-scales are: security, self-development, altruism, life-style, physical

activity, detachment, independence, prestige, management, co-workers, creativity, money and surroundings.

Integration of Vocational Measures

While there are obvious similarities between the three measures mentioned above, few authors have attempted to directly compare them, likely because they were developed separately for different purposes. Macnab and Fitzsimmons (1987) hypothesized that, despite differences in terminology, the MIQ, WVI, VS and WAPS measure highly similar constructs, and they examined this interconnection empirically. The authors noted that while the MIQ purports to measure needs, the WVI and VS values, and the WAPS preferences for work aspects, their operationalizations are highly similar, asking respondents to rate or rank a number of attributes of work. Macnab and Fitzsimmons (1987) identified eight sub-scales or traits that are common to all four of the measures. They collected data from 438 respondents who completed all four measures, and subjected it to a multi-trait multi-method analysis to determine the relative contributions of the traits and the measures to total variance. Their results showed support for both convergent and discriminant validity for the eight common items they selected. In other words, similar trait scores for the different measures were correlated, while dissimilar trait scores across measures were not. They therefore concluded that the four measures were measuring highly similar constructs.

Other Vocational Measures of Work Values

As noted previously, the list of vocational measures discussed above is far from exhaustive. As Zytkowski (1973) noted, a confusing array of measures has been developed to measure vocational variables. A number of other measures exist, which bear similarities to the three discussed above. For instance, Manhardt's (1972) Job Characteristics Scale (JCS) contains 25 job characteristics that are rated by respondents on a 5-point Likert-type importance scale. The JCS has been used in studies of work values differences related to age (Burke, 1994b) and gender (Abu-Saad & Israelowitz, 1997). Elizur (1984) devised a 21-item questionnaire measuring the importance of various work outcomes on a six-point scale. His questionnaire built upon an earlier 11-item questionnaire designed by Jurgensen (1978). A revised form of Elizur's (1984) questionnaire, incorporating three new items, was presented by Elizur (1994) and subsequently employed by Elizur (1996) and Elizur and Sagie (1999).

Numerous other measures have been devised to assess the relative importance of work attributes, characteristics and outcomes, all with slightly different purposes (e.g. Billings & Cornelius, 1980; Bretz & Judge, 1994; Jurkiewicz, 2000; Pennings, 1970; Schwarzweller, 1960; Simpson & Simpson, 1960; Harrington & O'Shea, 1993; Taylor, 1994; Alpers, 1975; Mason, 1994). A number of these instruments were reviewed in the creation of a vocational measure for this study, as will be detailed in Chapter 8.

Criticisms and Summary of the Vocational Values Research

A key criticism of the vocational work values research is that it suffers from a lack of theoretical grounding. Ros, Schwartz and Surkiss (1999) argued, "the types of work values proposed until now have derived from empirical analyses, from attempts to operationalize isolated theoretical hunches, or from applications of classical distinctions (cognitive, affective, instrumental) that have no relevance to the motivational content of values - the essence of values as goals" (p. 68). Given the different intended purposes and conceptual bases of the various vocational measures, it is not at all surprising that they do not share a common theoretical perspective with other streams of values research. Undoubtedly, had the vocational researchers sought to develop an encompassing concept of values and accompanying measures, they would have started from more theoretical bases.

For the most part, the vocational behaviour literature stems from a conception of work values as those aspects of the work experience that *have value* or are considered important in making decisions and selecting appropriate behaviour. This implies a conceptualization of values as that which is desired, rather than the more abstract conception of desirability that suits the definition of values presented in chapter one. However, the factor structure that emerges from these measures provides more useful information about the underlying criteria upon which specific assessments of desirability are founded. In a sense

then, factor analysis of vocational measures can be viewed as an inductive means of deriving the criteria of desirability underlying specific choices about what is desired.

3.3.2 *Values as Work Behaviour*

Meglino and Ravlin (1998) argued that values can be divided on a basic level into those values that an individual places on an object or outcome, and those values that an individual is said to possess. Employing this bifurcation, the vocational values literature described in the preceding subsections would fall into the former category, representing values ascribed to some work-related objects. Meglino and Ravlin (1998) argued that it is more appropriate for social analysis to focus on the latter type of values, which are meant to describe people as opposed to objects. They noted that these type of values include both instrumental and terminal values, to use Rokeach's (1973) famous terminology, but that instrumental values are more pertinent to the realm of work. Thus, rather than focusing on the value attached to work-related target objects, they, and a number of other work values researchers, have focused on the values that individuals hold regarding modes of behaviour. The basis for this stream of research is to examine the role of values in understanding and predicting behavioural patterns, and similarly, to examine which values are associated with or indicative of particular modes of behaviour. In addition to the work of Ravlin

and Meglino and their colleagues, that of England (1967) can be lumped into this behaviourally focused stream of work values research (Dose, 1997).

3.3.3 *Significance of Work*

The vocational values and values as work behaviour streams of research described above are somewhat similar in that they both view work values as assessments of objects in the workplace, be they work aspects, outcomes or behaviours. A third stream of values research, however, takes a somewhat different tack, viewing work values as more abstract assessments of the meaning or significance of work to one's existence. The *significance of work* research is less concerned with the content of work or the behaviours associated with work than it is with the individual's assessment of work in general and the abstract activity of "working." This view of values treats work itself as the object of interest.

According to the typology developed by Dose (1997), this stream of research includes the voluminous body of literature devoted to the concept of the Protestant work ethic, a specific set of work-related beliefs that will be discussed in the sections below. The Protestant work ethic is explored in the sections that follow.⁴

⁴ Discussions of two other research projects related to the 'significance of work' stream of research – Nord, Brief, Atieh and Doherty (1988, 1990) and the Meaning of Working (MOW) Studies (1987) – have been omitted from this review as they are not pertinent to the measurement of values in this thesis.

The Protestant Work Ethic

A significant body of research has been amassed concerning the set of beliefs referred to variously as the Protestant work ethic (PWE), the Protestant ethic, and simply the work ethic. The concept of the PWE was devised in the early twentieth century by Max Weber as a means of explicating the precipitating historical causes of the development of capitalism in the Western world. In his seminal book, *The Protestant Ethic and the Spirit of Capitalism*, Weber surmised that the beliefs about work endemic to Protestantism provided a moral justification for the accumulation of wealth that allowed adherents to associate work and worldly success with divine calling. According to Weber's theory, the PWE arose from the Protestant reformation and was adapted from primarily from the ideas of Lutheranism and Calvinism (Nord et al., 1988, 1990; Jones, 1997). A secular incarnation of PWE was enshrined in the founding principles of the United States, as evidenced in the writings of Benjamin Franklin and Horatio Alger (Nord et al., 1990, Bernstein, 1997). Weber argued that, beginning in the 16th century the PWE became embedded as a set of guiding social and religious beliefs, forming the basis for the modern Western view of work (Jones, 1997).

While work had been previously viewed as a burden, which was to be avoided whenever possible, the Reformation glorified the notion of hard work, however menial the task, and the accumulation of wealth, combined with ascetic self-control of consumption, as the highest form of human service to God (Mudrack, 1997; Harding & Hikspoors, 1995). In other words, generating endless

wealth through one's own toil and hard efforts was viewed as a sign of divine grace (Harding & Hikspoors, 1995). Jones (1997) noted that, contrary to common belief, Weber (1958) did not believe the PWE to be a sufficient condition for the development of capitalism, although he did view it as necessary. Weber viewed other developments, such as the availability of labour, the development of rational legal systems and effective bookkeeping as necessary, but not sufficient in absence of the religious ethos of the PWE (Jones, 1997). Thus, Weber (1958) asserted that the PWE acted as the catalyst that allowed capitalism to evolve out of emerging economic and social conditions of the time (Furnham, 1984).

Many authors have assumed that the PWE provided the basis for modern Western work values (Harding & Hikspoors, 1995; Bernstein, 1997). Adrian Furnham, who is one of the most prodigious scholars of the PWE, stated that there were four main elements to Weber's (1958) conception of the PWE:

- *The Doctrine of Calling*, according to which the believer is called by God to work for His glory and hence work itself was virtuous and had to be excellently and honestly done.
- *The Doctrine of Predestination*, which suggested that signs of God's grace should be seen in this life, such as occupational success and hence successful people could see themselves as among the elect. ...every moment spent in idleness, leisure, gambling, hedonism is worthy of moral condemnation and is a sign of imperfect grace.
- *Strong Asceticism* . . . which stressed saving, investment, the systematic use of the amassing of capital and the reduction of expenditure on vices and luxuries.
- *The Doctrine of Sanctification*, which, by rejecting the mystical sacramental system of Catholicism, stressed rational control over all aspects of life. Rationalization was a common theme in

Weber's work and he argued that in Calvinism each individual had to make his or her own moral decisions and that all action had to be considered in terms of their ethical consequences. (Furnham, 1984, p. 88)

While the PWE originated as a sociological variable, it has been investigated throughout the social sciences. Historians and theologians have been concerned primarily with the accuracy of Weber's claims, while sociologists and anthropologists have been more concerned with the social evolution of the PWE and its consequences for modern adherents (Furnham, 1990). The PWE concept was introduced in the early 1960s to the field of psychology, and has since received much attention as an individual value in studying work outcomes and attitudes (Furnham, 1990). The psychological perspective of the PWE views as a personality variable relating to one's beliefs in the value of hard work, frugality, independence activity rather than leisure (Furnham, 1987). It has been argued that the psychological adaptation of the PWE concept suffers from a loose interpretation of Weber's original thesis and that psychological investigations of the PWE and the measures they employ are somewhat independent of the original concept, as described above (Furnham, 1984, Dose, 1997). While sociologists and other social scientists continue to investigate the implications of Weber's original thesis, psychologists have attempted to integrate the PWE concept into the study of individual work values. The PWE has become subsumed into the work values literature, to the degree that many researchers do not differentiate between the two concepts. For instance, Blood (1969), Kidron

(1978), Wollack, Goodale, Wijting and Smith (1971), Aldag and Brief (1975) and Wayne (1989) all used PWE scales as measures of work values.

The introduction of the PWE concept into the field of psychology facilitated the development of measures of individual adherence to the PWE. Since the 1960s, numerous measures of the PWE construct have been proposed⁵. Two prominent measures that have been employed in the PWE literature, those of Mirels and Garrett (1971), and Blood (1969) are described briefly below, followed by a discussion of Furnham's (1990) efforts to integrate various measures into a single PWE measure.

Mirels and Garrett (1971) - PWE as a Personality Variable

Unlike previous authors who had discussed the Protestant work ethic as a set of dynamic, socially constructed and transmitted beliefs, Mirels and Garrett (1971) treated the PWE as a dispositional personality variable. Their emphasis was thus on the psychological meaning of the PWE to its adherents as individuals, which in turn affects individual behaviour. Mirels and Garrett's (1971) original research found their PWE scale to be positively correlated to three other personality variables: sex guilt, authoritarianism, and internal locus of control. They also found adherence to the PWE to be associated with vocational interest patterns indicative of occupations involving work that is concrete and pragmatic. Beit-Hallahmi (1979) questioned the assumption that the PWE is indeed a

personality variable, and tested the relationship of Mirels and Garrett's (1971) PWE measure to a number of social background variables in order to determine whether the PWE was a "personality variable, independent of social background, or whether it was a reflection of cultural group traditions" (p. 264). He found the PWE to be related to one's degree of religiosity, ethnic background and political affiliation, but not to one's socio-economic status. On the basis of these findings, he concluded that the PWE reflects social and cultural background and is not merely an individual personality variable. These findings have not deterred subsequent researchers from using the Mirels and Garrett (1971) PWE scale.

The development of the Mirels and Garrett (1971) measure began with the generation of a set of attitudinal statements designed to capture the essence of the PWE concept. The complete set of statements was administered to 117 undergraduate students and was factor analyzed to select items reflecting a common construct. In the end, 19 items were retained, and were shown to have acceptable internal consistency as a set. Respondents are asked to indicate their agreement on a six-point scale bound by "I disagree strongly," on one extreme and "I agree strongly" on the other, with no neutral or undecided point. The items are given in Appendix D.

The Mirels and Garrett (1971) PWE scale is by far the most commonly used measure of adherence to the PWE (Furnham et al., 1993). Researchers

⁵ A good overview of the various PWE measures is provided by Furnham (1990), who discussed and administered seven different PWE measures.

have consistently found the 19-item set to have acceptable reliability with coefficients ranging from 0.67 to 0.8 (Jones, 1997). Factor analyses of the Mirels and Garrett (1971) scale have identified varying factor structures, as seen in Table 3.2. Furnham (1990) factor analyzed response data for 78 PWE items from seven different measures, including the 19 given by Mirels and Garrett (1971). He found the Mirels and Garrett items to load on three factors, related to: 1) admiration of and willingness to partake in hard work (10 items); 2) admonition of leisure (3 items); and 3) asceticism and the evils of having too much money (5 items). Tang (1993) factor analyzed the Mirels and Garrett (1971) scale and identified four factors, similar to those found by Furnham (1990). The four factors, which included 13 of the 19 items and accounted for 46% of variance, are as follows: 1) Hard work (4 items); 2) Internal motive (2 items); 3) Asceticism (4 items); and 4) Attitudes towards leisure (3 items).

Wentworth and Chell (1997) identified five factors in the Mirels and Garrett PWE measure, which they termed: 1) Worthwhile use of time (5 items); 2) Disdain for leisure time (2 items); 3) Admiration for hard work (4 items); 4) Appreciation for the rewards of hard work (3 items); and 5) Disdain for indolence (4 items). These five factors accounted for 48.6% of the variance in PWE scores. In both of these factor analyses, two items (see items 12 and 18 in Appendix D) did not load onto any of the factors. It is interesting to note that in all three of the factor structures that were identified, separate, independent

Table 3.2: Factor Analysis Results for the Mirels and Garrett (1971) PWE scale

Study	Factors (number of items)
Furnham (1990)	1) Admiration of / Willingness to Partake in Hard Work (10) 2) Admonition of Leisure (3) 3) Asceticism (5)
Tang (1993)	1) Hard Work (4) 2) Internal Motive (2) 3) Asceticism (4) 4) Attitudes towards Leisure (3)
Wentworth and Chell (1997)	1) Worthwhile use of time (5) 2) Disdain for Leisure Time (2) 3) Admiration for Hard Work (4) 4) Appreciation for the Rewards of Hard Work (3) 5) Disdain for Indolence (4)

factors were identified for beliefs related to hard work and leisure, indicating that they are not merely polar ends of same factor, but separate, distinct factors.

The PWE scale provided by Mirels and Garrett (1971) has proven to be robust and has thus become the preeminent measure of individual adherence to the principles of the Protestant work ethic. Furthermore, factor analysis indicates that the scale appears to be reflective of the tenets of Weber's (1958) original conceptualization. Jones (1997) noted that "although this scale seems to have been created without explicit reference to the specifics of Weber's thesis, it touches directly upon several of his points" (p. 764).

Blood's (1969) Pro-Protestant and Non-Protestant Ethics

A lesser utilized measure of the PWE was devised by Blood (1969), who characterized the polar ends of the Protestant ethic continuum as: "Someone who thinks that all work is an abomination to be undertaken only when all other

strategies fail,” versus “a person who feels that personal worth or occupational achievement would likely derive some satisfaction even in a demanding menial position” (p. 456). This is a notably narrower conceptualization of the PWE than that provided by Mirels and Garrett (1971), focusing only on the notions of hard work, and to a limited extent, leisure. The concept of asceticism, which, as noted above, was a key theme in Weber's (1958) thesis, is not reflected in Blood's (1969) measure.

Blood's (1969) measure consists of two separate scales—a four-item scale measuring adherence to the *Pro-Protestant Ethic* and another four-item scale measuring adherence to a *Non-Protestant Ethic*. For both scales, respondents are asked to indicate their degree of agreement to each of the statements on a six-point scale ranging from "Disagree completely" to "Agree completely." Factor analysis of Blood's (1969) original study data on a sample of 114 airmen and 306 aircraft workers revealed that the two scales formed discrete factors that were moderately correlated. This factor structure was confirmed by Aldag and Brief (1975) in a study of 131 manufacturing employees. In subsequent studies, researchers have found the Blood (1969) scales to have demonstrated satisfactory reliability as well as construct, concurrent and predictive validity (Saks, Mudrack and Ashforth, 1996; Furnham, 1984, 1990). A cross cultural study by Furnham et al. (1993) employing the Pro-Protestant Ethic scale found it to demonstrate internal reliability ($\alpha=0.73$).

Integration - Furnham (1990) and colleagues

The study of the PWE has flourished in the past two decades due primarily to the work of Furnham (1984, 1987, 1990) and his colleagues (Baguma and Furnham, 1993; Furnham et al., 1993). Their research project has focused on integrating theory and research on the PWE and on measuring the concept across cultural contexts. Furnham (1990) compared and contrasted seven existing self-reporting measures of the PWE, including those of Blood (1969) and Mirels and Garrett (1971), described above. Content analysis, as well as correlational and factor analyses were conducted in order to identify commonalities and differences among the measures. Content analysis conducted by three independent raters revealed seven discrete factors in the 78 total items of the seven scales included: 1) work as an end in itself; 2) hard work and success; 3) leisure; 4) money and efficiency; 5) spiritual and religious; 6) morals; and 7) independence and self reliance.

Furnham's (1990) factor analysis of the 78 items of the seven combined scales revealed five discrete factors encompassing 59 of the included items: 1) willingness to take part in and admiration of hard work (27 items); 2) non-leisure (11 items); 3) religion and morality (8 items); 4) asceticism and the dangers of frivolous spending (6 items); and 5) the importance of independence and self sufficiency (7 items). It is interesting to note that this fifth factor consisted entirely of the items from Buchholz's (1978) Work Ethic scale, suggesting that its focus is sufficiently different as to represent a dimension not expressed in other PWE

measures. Correlation analysis revealed significant but generally moderate correlations between all seven of the PWE measures studied, suggesting that they measure similar, but somewhat distinct concepts (Furnham, 1990).

Blau and Ryan (1997) used Furnham's (1990) results to further test the dimensionality of the work ethic, and to develop a more parsimonious, secular measure of the work ethic. They began by eliminating the eight religious and moral belief items from Furnham's (1990) factor structure to generate a purely secular measure. Next, on the bases of Furnham's (1990) content analysis and factor loadings as well as Weber's (1958) original thesis and subsequent relevant literature, Blau and Ryan (1997) reduced the remaining 51 items from Furnham (1990) to a more manageable set of 25. The 25 items selected came from six of the seven measures of the work ethic used by Furnham (1990) and Furnham et al. (1993). The results obtained from a sample of 562 respondents were factor analyzed, generating a four-factor structure incorporating 18 of the 25 items⁶: hard work (6 items); non-leisure (5 items); independence from others (4 items) and asceticism (3 items). These results confirmed the factor structure obtained by Furnham (1990). Blau and Ryan suggested that the scale could be further shortened to a 12-item measure by selecting the three items that loaded highest on each of the four factors. Balu and Ryan's refined version of Furnham's (1990) scales are presented in Appendix E.

Summary: Protestant Work Ethic

The Protestant work ethic has a long history as a subject of historical, sociological, philosophical, theological and economic inquiry. Its relatively recent introduction into the study of psychology has also given it a place in the study of work values. As a concept, the PWE benefits from a fair degree of consensus regarding its nature, its dimensions and appropriate measures. The psychometric appeal of PWE measures has led to its popularity as a measure of work values. Yet despite its popularity as a construct, the PWE entails only a limited set of work values that represent one specific orientation toward work as an activity. Limited empirical attention has been dedicated to the definition of alternative orientations to work (Buchholz (1978) is a notable exception). A final, theoretical field of values research, described below, has been dedicated to a fuller investigation of the various orientations to work that may exist.

3.4 Integration: Putting the Pieces Together

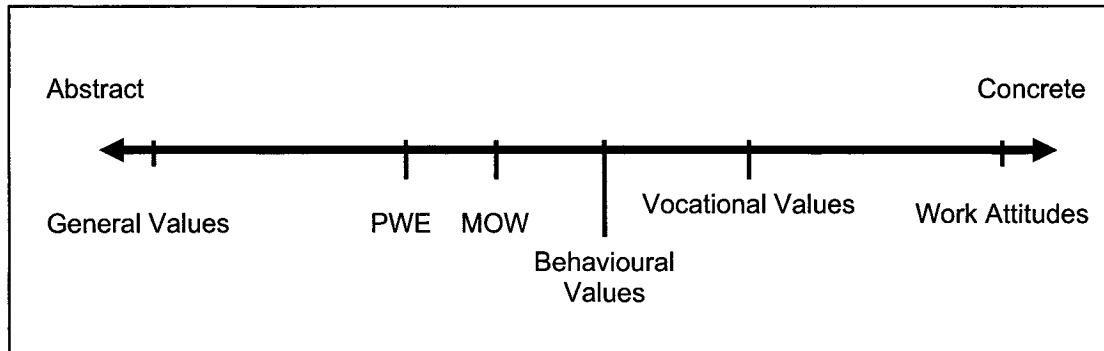
This chapter began with a discussion of work values as they relate to general human values, and has presented an overview of varying perspectives on work values. The difficult task remains of integrating these conceptualizations in some way to provide an overall view of work values. As shown in Figure 3.3, each of the various approaches to the study of work values can be placed on the

⁶ Blau and Ryan (1997) used the following criteria in the retention of factor items: factor loadings of 0.5 or higher, a difference of 0.20 or higher in the two highest loadings across the factors for

same continuum that was proposed for attitudes and values in Figure 3.2. At one extreme lie basic human values as psychological assessments of potential behaviours and end-states of existence. At the other extreme lie work attitudes as assessments of specific work-related objects, such as one's job, organization or occupation. Between these two extremes lie work values as assessments of objects of varying degrees of abstraction, ranging from basic human values that affect one's approach to working (the Protestant Work Ethic) to values about work activity in general (the meaning of working (MOW) research), to values regarding working behaviour (behavioural values) to values regarding specific aspects or attributes of work and the work environment (vocational values). Taking this view, each of the schools of work values research provides a different lens through which the realm of work activity is investigated at a different degree of detail. A full conceptualization of work values should therefore employ multiple approaches simultaneously in order to examine an individual's beliefs and feelings about work from multiple levels of abstraction.

any item, eigenvalues of 1.0 or greater, and factors must be represented by at least three items.

Figure 3.3: Detailed Values – Attitude Continuum for Work



3.5 Summary

This chapter has examined the way in which general values have been seen to impact on the domain of work activity. Work values have generally been viewed as separate, but related to general values, though the causality of the relationship is ambiguous. A number of different approaches to the study of work values have been discussed, along with popular measures employed in each approach. The various approaches have emerged from different academic disciplines at different times and for different purposes, and thus exhibit a great degree of disunity. Each of the approaches has a distinct focus, and they differ in the degree of abstractness of the constructs that they measure. The common thread that unites these streams of research is a concern for the way that work as an activity is viewed, either by individuals or by social groups. Together, these approaches and their associated measures provide a full picture of the underlying beliefs and judgment criteria that individuals employ in assessing work activities, behaviours and outcomes.

4 *Theories of Generations & Adult Development*

Since ancient times, philosophers have recognized that people of different age groups vary in their perspectives on the world. Nowhere has this been more keenly felt than in the parent-child relationship, where tensions between genealogical generations are an established fact of life. Yet scholars have also recognized the utility of studying social differences at the aggregate level as drivers of social change. As a phenomenon expressed at the societal level, generations fall within the ambit of the discipline of sociology. Among sociologists, it is widely recognized that the seminal contribution to the theory of generations is given in German sociologist Karl Mannheim's 1923 essay 'The Problem of Generations' (Pilcher, 1994; Eyerman & Turner, 1998; Scott, 2000). Although Mannheim's original work is now eighty years old, it remains the basis for most modern analyses of the generational phenomenon (Laufer & Bengston, 1974), and has received renewed attention in recent years (Pilcher, 1994; Eyerman & Turner, 1998). Mannheim's work provides the lexicon through which generations can be discussed, and outlines a theory of their nature and role in social change. His invaluable theoretical contribution is considered in the following sections.

4.1 Mannheim's (1952) Theory of Generations⁷

Mannheim (1952) believed that the concept of generation had potential as a powerful explanatory factor in social analysis, particularly in understanding the sociology of knowledge and the dynamic process of social change. Mannheim viewed generation as a socially stratifying variable representing people's location in historical time and within their own life courses. Like religious beliefs or social class, which had been studied as bases for the stratification of a society by Weber and Marx respectively, Mannheim saw generation as a crucial means of understanding the interactions between members of a society. The crux of Mannheim's theory of generations is that individuals born within the same historical period and socio-cultural context experience the same events and context during their crucial formative years. This shared experience serves as a potential basis for the emergence of a common "inborn way of experiencing life and the world" (p. 283). According to Mannheim,

The fact of belonging to the same class, and that of belonging to the same generation or age group, have this in common, that both endow the individuals sharing in them with a common location in the social and historical process, and thereby limit them to a specific range of potential experience, predisposing them for a certain characteristic mode of thought and experience and a characteristic type of historically relevant action. Any given location, then, excludes a large number of possible modes of thought, experience, feeling and action, and restricts the range of

⁷ Mannheim's original manuscript was published in 1923.

self-expression open to the individual to certain circumscribed possibilities. (p. 291)

4.1.1 *Contemporaries and Coevals*

The notion that individuals born in the same historical time are shaped by the same formative experiences is critical to Mannheim's theory. The indoctrination of ingrained beliefs about the world early in one's life is key to explaining why contemporaries of different ages (i.e. the young and the old) who experience the same historical events are not similarly affected by them—what Mannheim refers to as the “non-contemporaneity of the contemporaneous.” To understand this concept, one must discern between *contemporaries*, who are people of all ages living contemporaneously in a given period of historical time and *coevals*, who are progressing through their life cycles contemporaneously, having been born at roughly the same point in history (Ryder, 1965). To illustrate this distinction, consider two individuals of different ages alive in the same historical period who experience a significant event. These individuals are contemporaries in that they coexist in the same historical and cultural context, but cannot be coevals unless they are at the same stage in their life cycles, having experienced common histories throughout their lives. As contemporaries, they are both witnesses to the event that has occurred, but unless they are coevals, they are likely to experience and interpret the event in different ways,

given their relative past experiences and the futures that they envision for themselves.

Pilcher (1994) noted that Mannheim's theory of generations is unique in its simultaneous consideration of the biological and social aspects of human existence and their interconnectedness. In other words, Mannheim recognized the importance of the human processes of birth, aging and death as well as the contextual importance of the trajectory of historical time. In basic terms, a generation is comprised of individuals progressing through the stages of life together during the same period of historical time. The complex relationship between the life cycle and historical time is an important element of the theory of generations that will be explored in greater detail in a subsequent section of this chapter.

4.1.2 The Critical Role of Formative Experiences

The role of formative experiences in the constitution of generations is a crucial idea that merits elaboration. The key to explaining the notion of 'the non-contemporaneity of the contemporaneous' lies in the postulate, gleaned from Freudian psychology, that the core of personality is formed early in life in the years of youth (Ryder, 1965). The assumption is that the historical events and social norms prevalent in one's youth play a formative role in establishing the way in which he or she views the world, and that individuals exposed to the same

context in their formative years will be predisposed to adhere to a common worldview. Pilcher (1994) described this phenomenon succinctly,

People are 'fixed' within a socio-historical world that predominated in their youth and they carry this with them throughout their lives. In this manner, each social generation, although contemporaneous with other generations, has a distinctive historical consciousness which leads them to experience and approach the same social and cultural phenomena differently (p. 488).

It is the bond of a commonly experienced formative context that creates a "link between spatially separated individuals who may never come into personal contact at all" (Mannheim, 1952: 306). Although, as will be seen later in this chapter, human development is now theorized to occur throughout the life cycle, the shared experience of the formative years is of critical importance, as it sets the foundation for the remainder of the life cycle. Having a similar foundation, coevals progress through their life cycles similarly, sharing a common bond at every stage.

4.1.3 The Formation of Generational Movements

Mannheim's (1952) original thesis is adroit in its contemplation of how social generations are formed. In elaborating the method through which generations come to exist as salient social groupings, Mannheim provided a lexicon for discussing generations that is evident to date in sociological writings on the subject. The terminology of Mannheim's theory is discussed in the following sections.

Generational Location

Mannheim introduced the term “generational location,” to represent the temporal space in history occupied by a group of people progressing through their life cycles contemporaneously. According to Mannheim (1952), “Individuals who belong to the same generation, who share the same year of birth⁸, are endowed, to that extent, with a common location in the historical dimension of the social process” (p. 290). Mannheim went on to state that location is not sufficient in explaining and understanding generations. For the formative events to be similarly construed in a collective consciousness, individuals must also coexist in the same geographical and cultural location. In other words, to form a generational bond, coevals must not only experience the same events at the same time in the formative years of their youth, but they must also experience them in a reasonably similar context, so that the events have a shared meaning among coevals.

Thus, being born and raised in the same period in historical time and in the same social and cultural context forms a necessary condition for the formation of generational bonds as a social group. Yet Mannheim surmised that not every generational location will necessarily coalesce into a discernible social

⁸ Although the translation of Mannheim’s original essay refers to the generation as those sharing the “same year of birth,” there is no other evidence in the essay to suggest that he intended generations to be comprised of only those born in a single year.

group with a distinct social consciousness. While a shared place in history and culture is a necessary condition for the formation of generations as social groups, it is not sufficient. Further conditions must exist for the generational bonds to be actualized.

Generation in Actuality

Mannheim (1952) argued that the generation would not emerge as a salient social category unless its members “participate in the common destiny,” exercising the potential inherent in their generational location. The more concrete manifestation of a generational location into a discernable social entity, he termed the ‘generation in actuality.’ He argued that one can “speak of a *generation as an actuality* only where a concrete bond is created between the members of a generation by their being exposed to the social and intellectual symptoms of a process of dynamic de-stabilization” (p. 303). In other words, there must be some historical event or set of circumstances that triggers the formation of generational allegiances. To put it more poetically, there must be some spark to ignite the flame of generational unity. Furthermore, to form a distinct generational bond, members must not only experience the same events contemporaneously, but they must experience them differently from those individuals belonging to a different generational location. When this occurs, the potential inherent within the *generational location* is realized as a *generation in actuality*.

The formation of a generation in actuality is thus facilitated when historical events have significantly different implications for the lives of individuals of different ages. When this is the case, people of different ages are likely to respond differently to the events, spurring the formations of age-related social bonds. The case of the United States' involvement in Vietnam in the late 1960s is a poignant illustration of this process. The post World War II baby boom had created a large cohort of people who were in the years of their youth or young adulthood at the time of the conflict, creating the precondition of generational location. The circumstances of the conflict affected people of different ages in different ways—older members of society were in the position to engage in the conflict and to conscript young soldiers, while younger people were forced to enlist and fight in the war. The conditions existed that allowed a generation to be actualized as a social grouping in response to the events. The result was the emergence of a generational conflict that manifested itself in various forms of political protest.

4.1.4 The Role of Social Change in Generational Formation

While Mannheim did not provide a framework to determine if, how and when generations will be actualized, he did discuss the pace of social and technological change as a key factor. If change is not evident, he argued, then people born at different times will experience ostensibly similar realities in their

formative years, leading them to have similar worldviews. In this case, when similarly constituted members from two different generational locations experience a historical event, their reactions and interpretations would not be identifiably divergent, rendering the generational separation between them unnoticeable. In times of rapid social and technological change, however, as in the current historical context, members of different age cohorts experience fundamentally different contextual realities in their formative years, leading to tenable generational identities.

Mannheim also theorized that when the pace of change is extremely rapid, it may prevent the formation of identifiable generational identities. This phenomenon occurs because rapid change necessarily means shorter periods of stability. The brevity of the periods of stability between periods of change would lead to smaller and smaller generational cohorts as the formative experiences that allow generations to coalesce change significantly over short periods of time. In other words, in times of rapid change, generations crystallize very quickly, preventing them from accumulating more members from younger age cohorts, who will be crystallized into the next generation to form. This phenomenon would result in a number of small cohorts, each with little distinct influence. This is true except in the case where demographic circumstances result in a large cohort born in a short period of time. In this scenario, even a generation occurring over a short number of years could be sizeable enough to be influential. Such a

unique convergence of social and demographic factors is evident in the rapid increase in birth rates following World War II, commonly referred to as the baby boom.

To illustrate this point, consider the metaphor of a busy commuter subway line. The more frequently the trains appear at the station, the less crowded each train will be, as there is less accumulation between trains of passengers waiting to ride. The less frequently the trains arrive, the more crowded each train will be. However, during rush hour, when the number of commuters increases markedly, trains will be crowded despite the increased frequency with which they appear. The temporary boom in passengers negates the impact of increased train frequency. In a sense, the baby boom was a brief 'rush hour' in the historic trend toward declining birth rates. It is possible that the baby boom has brought temporary saliency to the issue of generations, which is otherwise in decline. As will be seen in the following chapter, Adams (1998) has identified greater heterogeneity amongst more recent generations. This finding could be interpreted as evidence that the rapid pace of social change is making generation less relevant as a social category. There is insufficient evidence at this point to make such a conclusion. Only history will tell if the concept of generation survives beyond the influence of the baby boom.

4.1.5 The Role of Punctuating Historical Events in Generation Formation

A number of authors, including Laufer and Bengston (1974), Eyerman and Turner (1998) and Mead (1978) have stressed the need for a punctuating social or historical event to clearly demarcate the boundaries of a generational divide. Without such a punctuation, it is argued, the lines of demarcation become blurred and the generational groupings appear less discriminant. In such circumstances other social bonds, such as those of race, religion and social class serve as the bases for social division (Laufer & Bengston, 1974). It is theorized that a major historical event creates a point of punctuation in the trajectory of history, which creates a gulf between those who experienced the event first hand and those who know of it only through second-hand accounts. In keeping with the notion of a punctuating event, Laufer and Bengston (1974) proposed three criteria necessary for a generational movement to emerge: when “(a) new skills are required, (b) new patterns of social organization emerge, and (c) alterations in values and life styles are required to meet the above demands” (p. 187). All of these are symptomatic of a major historical event, but apply equally to a more general social change, such as a major technological innovation. Thus, the ‘event’ that forges generational boundaries may be more gradual than a single historical incident, so long as its impact is significant. For instance, Gutenberg’s invention of the printing press may seem less an event than an innovation, but

the implications for those born before and after its invention were undeniably significant.

Mead (1978) has contended that the end of World War II, and in particular the initial use of the atomic bomb, constituted a clear punctuating event that created the infamous 'generation gap' in 1945. She argues that this single event of global importance created the social equivalent of a 'trench' separating those who grew to adulthood before the bomb and those who grew up after its power was unleashed. One could similarly argue that the widespread introduction of the personal computer and the Internet into the lives of everyday citizens constitute instances of punctuation, separating those who came to adulthood before their popularization from those who have known them all of their lives.

The implication of the punctuating event is that generations will be more salient as social phenomena at some points in history than in others. When punctuating events are infrequent—hence when social and technological change is less evident—there will be less evidence of 'generations in actuality,' coming to fruition. When this occurs, little notice is taken of generational differences. This partially explains the rise and fall of the popularity of Mannheim's theory at different times in its history. As Laufer and Bengston (1974) noted, the concept of generations appears infrequently in sociological texts and indices until the mid-1960s, when it enjoyed a resurgence in its popularity corresponding to the perceived 'generation gap' as members of the baby boom cohort moved through

their formative years. Recent years have again seen resurgence in the attention paid to generational differences, as the Baby Boom generation has been confronted with the first generation to follow it, now that the post-baby boom generation (colloquially referred to as 'Generation X') has moved into adulthood and the workplace.

4.1.6 *Generation Units*

Mannheim (1952) made a final critical observation about generations—that members of a generational location, even when it is actualized, do not necessarily respond in a unified manner to the influences of formative experiences. As Mannheim put it, "within any generation there can exist a number of differentiated, antagonistic *generation-units*. Together they constitute an 'actual' generation precisely because they are oriented toward each other, even though only in the sense of fighting one another" (pp. 306-307, italics added). Generation units constitute the various responses of sub-groups within the actualized generation to the stimuli faced uniquely by the generation as a whole. In essence, generation units are to the generation as subcultures are to a society's culture; there is an overarching commonality that binds all members of the generation, but within the generation there are distinct manifestations of those commonalities.

Mannheim (1952) distinguished between leading, diverted and suppressed types of generation units; those people who are supportive of the

predominant trends of their times and social milieus, those who are not supportive but go along with them out of relative indifference, and those who oppose the movement, respectively. The implication of the existence of generation units is that generations are not simply homogeneous social groupings. It is the coexistence and conflict of generation units that gives the generation as a whole its unique social presence.

Laufer and Bengston (1974) explored Mannheim's conception of generation units in the context of the 1960s, arguing that it is the generation unit that is the motor of social change, not the generation as a whole. They defined a generation unit as "those self-consciously active age based groups within a specific social strata which are creating competing and/or complementary styles of thought and life" (p. 195). They went on to argue that generation units "arise in response to the emergent issues of social-technological innovation, psychosocial development, and socio-historical milieu" and that they create "an oppositional consciousness, suggesting alternatives to the established culture—in short, social change" (p. 195). Their analysis identified four distinct groups evident in the youth culture of the 1960s: *radicals*, who attempted to alter existing social conditions; *bohemians*, who engaged in individualized forms of cultural revolt, such as breaking taboos; *communalists*, who actively sought to create a new and humane social order; and *revivalists*, who sought a return to the simpler days of the past. Similarly, in a recent survey of Canadian social values, Adams

(1998) identified a number of clusters of individuals (which he termed “tribes”) within various age categories that held distinct value orientations.

The existence of generation units means that generational differences cannot be merely treated as variations between two homogeneous groups. It is necessary to identify patterns of differences within the generations and then compare the composition of different generation units across generations. If individuals are not identified according to the generation unit to which they belong, then any observed differences between them and members of other generations may be obscured. In other words, it becomes necessary to identify the generational units within a generation and to examine the way that those units interrelate to form an identifiable generation. Only then can overall generational differences be clearly observed and interpreted.

4.2 Challenges in the Study of Generations

In the attempt to devise an empirical framework for the study of generational differences, one is faced with two immediate challenges. The first is that of defining what comprises the essence, or content, of generational differences. The second involves defining the boundaries of generations as social groups. Both of these challenges are explored in the following sections.

4.2.1 *The Content of Generational Differences*

The notion of generation presupposes the existence of social bonds that cut across social dimensions such as class and political ideology, causing individuals to coalesce into a recognizable social group. But it is not immediately evident what constitutes these bonds or how they can be described in recognized psychological and sociological terms. As Pilcher (1994) has noted, the specification of the content of generational differences is a point that is given scant consideration in Mannheim's original thesis. Instead, Mannheim (1952) wrote in generalities, employing vague terms such as "common destinies" and "integrative attitudes". Mannheim did, however, make extensive use in his essay of the term "entelechy," borrowed from German art historian Wilhelm Pinder, which refers to a generation's "expression of the unity of its 'inner aim' – of its inborn way of experiencing life and the world" (Mannheim, 1952: p. 283). Yet this term *entelechy*, while heuristically useful in Mannheim's essay, does not offer any guidance as to the precise nature of generational differences. The operationalization of generational differences in social-psychological terms is not explicitly addressed in Mannheim's thesis (Pilcher, 1994).

In a recent reconsideration of Mannheim's thesis, Eyerman and Turner (1998) defined generation as a "cohort of persons passing through time who come to share a common habitus, hexis and culture, a function of which is to provide them with a collective memory that serves to integrate the cohort over a

finite period of time” (p. 93). The terms *hexis* and *habitus* are borrowed from Bourdieu (1990). *Habitus* refers to enduring and shared dispositions to act in a certain manner which are socially obtained through interaction and are not consciously connected to specified ends. Hence, *habitus* is akin to a collective set of personality traits that emerges within a social group. The term ‘*hexis*’ refers to habits or manners of behaviour related to the body and the way it presents itself. These may include manners of dress, body gestures, and bodily markings such as tattoos and piercings. Thus, to say that a generation shares a common *habitus* and *hexis* implies that members of the generation share unconscious conceptions of appropriate modes of interaction, dress, speech and body image.

More specifically, Eyerman and Turner (1998) define the “generational culture or tradition” in terms of a “shared or collective cultural field (of emotions, attitudes, preferences and dispositions) and a set of embodied practices (of sport and leisure activities)” (p. 93). They provide a number of symbolic manifestations of “collective identity,” such as music, electronic media content (i.e. television, film, radio and the Internet), body images (e.g. tattoos and piercings), and fashion. It could be argued, however, that all of these are but surface manifestations of a deeper construct—a shared culture or something akin to a culture that is expressed through such symbols. Their conceptualization of generations, like those of other authors, provides a depiction of what generations

look like with respect to their differences, but it does not explore the underlying constructs within individuals that are expressed through these surface manifestations. This approach is useful as a means of categorizing individuals on the basis of their appearances and behaviours, but does little to address the underlying psychological and sociological constructs. As we have seen in the previous chapters, constructs such as attitudes, preferences and interests are more tangible manifestations of deeper constructs, particularly values. To gain a deeper meaning of what motivates generational differences, these deeper concepts must be accessed.

As shared beliefs about preferred end-states of existence and modes of behaviour, values constitute a key element of social grouping. Whether we discuss generations in terms of a culture or an identity or a 'habitus,' it makes inherent sense to include values as a critical underlying element of such an intangible social grouping. The theory of values tells us that they are learned in our formative years, based on our experiences and our interpretations of those experiences. Since generation is an enduring form of social grouping, it makes little sense for its core element to be a transitive one such as attitudes. Thomas (1974) noted confusion among commentators on generational differences, arguing that those who attempted to debunk the notion of a generation gap cited evidence of generational congruence at the attitudinal level, while those producing evidence supporting a gap had focused on the level of values. The

implication is that, while generational differences may not be evident in the consideration of certain specific objects (in Thomas's case, political attitudes), there are indeed differences in the underlying values that produce those attitudes. Thus, depending on the object being considered, the results could change markedly. Thomas's (1974) suggestion is that values are the pertinent construct in discussing generations as social phenomena.

If one surmises that generational differences must be rooted to some degree in value differences, then, following from the ideas presented in the preceding chapters, it could be hypothesized that distinct generational units would hold different work values as well. The theory of generations provided by Mannheim tells us that a generation has the potential to be significantly different from its predecessor, but that that potential need not necessarily be recognized in actuality. But when generational differences are evident, as is anecdotally suggested in the present time, then it would seem likely that value differences could be identified and that work values would differ in correspondence to social values in general. This idea will be explored in detail in the following chapter.

4.2.2 Defining the Boundaries of Generations

The second formidable challenge faced in the empirical study of generational differences concerns the definition of generational boundaries. Of course, if one is to measure differences in values or some other construct, between two generations or generation units, it is necessary to have some a

priori indication of where the boundaries lie between the two groups and hence, into which group a given subject would be placed. Again, Mannheim's original essay is fairly abstruse with respect to this problem (Pilcher, 1994). Mannheim does, however, make the distinction between quantitative and qualitative definitions of generation. The quantitative view seeks to determine the average period of time that it takes for dominant ideas to be supplanted by those of an emerging generation, thus determining the mean length of a generation. From this perspective, generations are viewed as time spans or epochs during which a particular mode of thought prevails. This implies that there is a natural rhythm of social change that is linked to genealogical generations, with social change occurring somewhat instantaneously with the shift of predominance of generations—a figurative changing of the guards as it were (Mannheim, 1952). Proponents of this positivist view of generational change generally estimate the life-span of a generation at 20 to 30 years, corresponding to the biological time span in which children succeed their parents as dominant members of society (Mannheim, 1952, Ryder, 1965, Howe and Strauss, 1993). Such a view oversimplifies the nature of society, in which members are born and die continuously, making the age differences between parents and children disappear in the aggregate. At the social level, this definition of boundaries would make sense only if all members of society gave birth to children at roughly the same time, which, of course, is not in keeping with reality.

A more appropriate quantitative definition of generational boundaries comes from the field of demography. Demographers generally decry the use of the term generation, which they use to denote genealogical kinship, preferring instead the term 'cohort' for a group of individuals who were born in the same historical time span and who consequently "experienced the same event within the same time interval" (Ryder, 1965: p. 845). Demographers define generational boundaries through the historical analysis of birth rates, identifying periods in which relatively large or small numbers of people have been born. Their supposition is that the size of one's birth cohort is a significant determinant of one's experience throughout life, as one progresses through the lifecycle simultaneously with those people of the same cohort.

For instance, prominent demographer David Foot (1998) argues that the experiences of the 'Baby Boom' cohort have been defined by their relatively large numbers, resulting in crowded schools, tight job markets and housing shortages. While Foot's hypothesis elucidates an important variable in the definition of generational boundaries—that of birthrate trends—it has two weaknesses that severely limit its utility. First, it places an inordinate emphasis on the life cycle and downplays the contextual environment that shapes the meaning of life events for temporally divergent generations. As will be discussed in greater detail below, the demographic approach focuses too much on one's age and not enough on the social meaning attached to that age at the point in history when

that age is attained by the individual. In other words, it over emphasizes the biological at the expense of the contextual.

The second flaw of the demographic view is that it does not explain how generational issues emerge when the sizes of birth cohorts are stable. If birth rates were stable over a long period, there would be no notable generational boundaries to speak of. This does not conform with the theory of Mannheim, which would argue that generations could form regardless of demographic trends, so long as the precipitating social conditions existed. It could be argued that demographic trends might help to create opportunities for generational 'location' to use Mannheim's terminology, but demographics do not guarantee the formation of a generation in 'actuality.' For that to occur, some salient event or experiences must emerge to cause coevals to coalesce into a tenable social group. In essence, the demographic view places an over-emphasis on cohort size as a determinant of generational experience. As Ryder (1965) noted, a cohort's size relative to the sizes of others is a critical factor in determining its experience throughout the life-cycle of its members, but it is not the only factor.

In contrast to these quantitative definitions of generations, the qualitative view argues that generations cannot be easily linked to units of time such as months and years, but must be viewed with respect to "an interior time that cannot be measured but only experienced in purely qualitative terms" (p. 281). Mannheim advocated the notion of 'interior time' as a means of delimiting

generational boundaries, as it recognizes the social factors, as well as the biological factors that affect the way in which humans perceive time. The implication is that generations need not be limited to a specific historical time span, but can encompass either very long or very short historical periods, depending on the perceptions of their members.

As noted previously, Mannheim suggested that the rate of social change affects the way in which generations are identified. It is in times of rapid social and technological change that our internal conception of time quickens, such that even a decade is perceived as a long period of time in retrospect. When the pace of change is frenetic, a year ago may seem the distant past. Similarly, one's perception of the passage of time may change over the course of the life cycle, with a year seeming a significant span of time for a young person, but not for an older person who has seen more of them come and go. Since generations are socially constructed and not merely a product of biological circumstance, it makes inherent sense that the subjective perception of time, and not objective measures of time is the salient factor in the definition of a generation. For these reasons, Mannheim eschewed the definition of generations in terms of objective time in favour of a more intuitive definition. In his words, "The time-interval separating generations becomes subjectively experienceable time; and contemporaneity becomes a subjective condition of having been submitted to the same determining influences" (p. 282).

The qualitative definition of generations is appealing from a theoretical standpoint as it allows for great variability in the length of generations depending on the context in which they are formed. When social and technological change is rapid, generations will occupy short time spans. Periods of relative stability would engender longer generational locations. From this perspective, generation is a concept that is *felt*, rather than measured. However, if generation is to be used as a construct in empirical research, *a priori* boundaries must be drawn somewhere. If we hold that the date of one's birth is the key factor in determining his/her generational location, then we must at some point make choices about where to draw lines in the endless continuum of births. Spitzer (1978) noted that this problem is endemic to any continuum, and need not be a concern. He suggested that age specific differences, if significant, will reveal themselves regardless of where the lines are drawn on the continuum. This may very well be true. Unfortunately, if generation is treated as a categorical variable, then the significant differences will reveal themselves as confounds if the generational categories are improperly specified, and may therefore be misinterpreted by the researcher.

Rosow (1978) argued that generational boundaries can only be determined through careful consideration of the events and circumstances that were evident to produce the generation in the first place. In other words, only by examining the specific differences that delineate the generation can its

boundaries be identified. This inductive approach has been employed by commentators such as Mead (1978), who reflected on social differences in America in the 1960s and concluded that they were products of the events of World War II. Such a presumption broaches tautology, however, as we must presume that a generation in actuality exists in order to identify the events and circumstances that delineate its boundaries. As Pilcher (1994) and others have noted, such an undertaking is made markedly difficult in the absence of clear punctuating events. Clearly, events of the magnitude of World War II do not occur often, yet generational differences continue to be 'felt' and reported in the media. It thus remains for the researcher to undertake the dubious task of deciding which events and conditions are significant enough to have created differing generational realities.

The remaining option is to make no claims about where generational boundaries might lie, and to use inductive statistical techniques, such as cluster analysis, to observe patterns that can be explained *a posteriori*. This approach was employed by Adams (1998), who analyzed values measures to identify "tribes" of similar value holders within three generational categories (analogous to Mannheim's 'generation units'). The obvious problem with such an approach is the potential for bias and post-rationalization of the results, which run counter to the principles of the scientific method of inquiry. Given these constraints, the best approach to defining generations may be a mixture of theoretical

hypothesizing based on empirical evidence, along with a willingness to interpret inductive results in light of those hypotheses to search for generational boundaries and for the boundaries of generation units within those generations.

4.3 The Role of Adult Development in Generational Differences

A final issue of significance in the study of generational differences relates to the confluence of biological, social and historical influences; an issue raised so aptly in Mannheim's (1952) essay. Because generations are cohorts of people born in the same historical period, progressing contemporaneously through both the life cycle and history, students of the generational phenomenon are faced with a daunting confound – no two generations will ever be at the same stage of development at a single point in time. In the case of cross-sectional research, this begs the question of what proportion of any observed inter-generational differences is related to life-cycle stage and what proportion is attributable to genuine social and historical change. For instance, in assessing differences between two age cohorts, one may ask, to what degree does today's 25 year-old differ from a member of an older cohort when he or she was aged 25? In order for generational differences to have analytical value, the contemporaneous developmental influences of coevals must be separated from the social and historical influences that affect all contemporaries. That is, life-cycle influences such as marriage and parenthood must be distinguished from contextual influences.

The most obvious solution to this dilemma, which has been proposed by a number of researchers, is to conduct quality longitudinal research that tracks changes in values over the life-cycle, while at the same time comparing members of different cohorts (Ryder, 1965; Pilcher, 1994; Levinson, 1978, 1996; Scott, 2000). Such research would provide invaluable data regarding the ways in which different age cohorts are progressing through their life cycles, which would allow comparisons of the changes encountered by the cohorts over time. A small number of longitudinal research programs are currently being undertaken by research institutes and agencies around the world, such as the British Household Panel Survey (BHPS), carried out by Britain's Institute for Social and Economic Research, Statistics Canada's National Longitudinal Survey of Children (NLSC) and the World Values Survey project, which is currently operating in 68 countries. The data from such studies are immensely insightful, as they provide information not only about current generational differences, but also the ways in which those relationships are evolving over time. However, the logistics and time dedication required in undertaking and interpreting such research makes it prohibitive for most researchers, and the data from institutional research is difficult to access and interpret. Furthermore, the high cost and logistical difficulties inherent in such studies usually means that the content of the studies must be fairly generalized in order to benefit the broadest possible audience of researchers. The unfortunate consequence is that in-depth investigation of specific concepts is

precluded. Thus, independent researchers are usually left to struggle with the issue of how to decipher the competing influences of context and life cycle within the confines of cross-sectional research. There is no consensus on how this can be accomplished.

4.3.1 Contending Views of Generational Differences

In absence of strong empirical evidence, a theoretical framework is needed to describe the complex interrelationship between the influences of biological aging and social and historical context. A survey of the extant literature reveals that there are contending views surrounding this issue. At one extreme lie critics of generational theory, including demographers, who suggest that people behave similarly at a given age to the way previous cohorts behaved at the same age. Foot (1998), for instance, argued that perceived differences between adults and youths in the 1960s were the result of the exaggeration of youth influences owing to the massive size of the youth cohort, not the result of fundamental social differences. At the other extreme lie researchers concerned exclusively with the social dynamics of generation phenomenon, who identify age-related differences in attitudes, values or some other construct in cross-sectional samples and then boldly proclaim these differences to be generational, with no consideration for life-cycle stage. Such is the case with recent studies of "Generation X" such as those of Burke (1994a) and Jurkewicz (2000). Between these two extremes lies the possibility of recognizing the simultaneous impacts of

common life-cycle stage and socio-cultural and historical context in the formation of generations as social groupings. Laufer and Bengston (1974) noted the need to differentiate among three effects: “(a) life-course effects—differences between age groups based upon stage in life, (b) cohort effects—differences based upon age-specific socialization experiences, and c) the historical factor—period effects or differences based on social change” (p. 185).

In order to make these differentiations, the nature of human development throughout the life cycle requires further consideration. As stated previously, generational theory contends that the developmental influences of one’s formative years impact on the way in which he or she experiences the world in adulthood. Yet it is necessary at this point to consider the ongoing process of development in the adult years in order to understand the psychological and social differences that separate subjects of different ages. Since the purpose of the present research is to examine generational differences in the work context, the focus must be on differences between adults of different ages, rather than on adults and youths. Hence, it is essential to focus on and control for the developmental processes in adulthood that differentiate adults of different ages. For instance, to say that there are values differences between a 25 year-old man and a man who is 55 begs the question of whether those differences are the result of genuine social changes or merely of developmental processes that

occur between the ages of 25 and 55. To gain a better understanding of the complexities of this issue we turn to the field of adult development research.

4.3.2 The Importance of Adult Development

In the tradition of Freud, much of developmental theory is concerned with childhood and adolescence, with relatively little consideration given to development in adulthood (Lemme, 1995; George, 1996; Levinson, 1996). There is, however, a growing body of literature devoted to the continued psychological and social development of individuals throughout adulthood. This section focuses on the influential work of Levinson (1978) to define the developmental lifecycle of adulthood, and concludes with a discussion of Havighurst's developmental tasks of adult life.

The notion of developmental stages is attributable to the ideas of Sigmund Freud, whose primary emphasis was the developmental stages of the first five years of life. The notion of development throughout the remainder of the life cycle was first introduced in the work of Carl Jung, who focused his attention primarily on the later years of life, beyond the age of 40. Jung's work was central to the emergence in the 1950s of the study of gerontology (Levinson, 1996). However, the focus of gerontology is restricted to development during the elder years of life. The gulf between childhood and old age was first bridged by the influential work of Erik Erikson, who proposed that the individual progresses through eight sequential stages in the development of his or her ego (the part of

the mind that perceives, interprets and learns about the real world). The theory is epigenetic, meaning that the stages occur sequentially with the outcome of each stage influencing the individual's progress throughout subsequent stages. Thus, the individual is viewed as being in a constant state of development, at any point in the life span reflecting the culmination of previous stages of development.

Each stage is characterized by a specific "crisis," or problem to overcome, which serves as the turning point of entry into the subsequent stage. The individual's response to the crisis of a given stage may be either successful or unsuccessful, and the degree of success with which the crisis is resolved affects the success of the individual in adapting during later stages. The four stages concerned with adult development are provided in Table 4.1.

The implication of Erikson's model in the present context is that formative influences in the individual's life and thus in those of a cohort of individuals of similar ages, are not isolated to the years of youth, but continue throughout life. Therefore, in order to understand generational differences in adult subjects observed through cross-sectional research, it is imperative that the life cycle stage of the various generations' members be considered.

Table 4.1 The Adult Stages of Erikson's Model of Psychosocial Development

Stage/Ages	Developmental Crisis	Description
Adolescence (teen years)	Identity versus Role Confusion	Adolescents use burgeoning cognitive abilities to develop a coherent sense of self by testing and integrating roles to form a single identity.
Young Adulthood (20s and 30s)	Intimacy versus Isolation	Young adults struggle to develop the capacity to share with and care about others and to form intimate relationships without fear of losing their identities. Isolation is the alternative response.
Adulthood (40 to 65)	Generativity versus Self-absorption (Stagnation)	An awareness of mortality brought on at the mid-life milestone brings about a concern for future generations and the legacy one leaves behind. The alternative is continued concern for one's own needs and wants.
Maturity (65 to death)	Integrity versus Despair	As life concludes, one looks back on it and seeks meaning and satisfaction with achievements in order to accept the inevitability of death. Those who are unsatisfied have deep regrets and feel the impossibility of change and therefore fear death.

Concerned about the “historical relativism” of his theory, Erikson advocated its expansion and updating by future theorists (Lemme, 1995). The most notable expansion of Erikson's ideas came from Daniel Levinson, Professor of Psychiatry at Yale University. Levinson undertook the ambitious research project of examining the lives of adult men and women through detailed biographical interviewing in order to better understand the processes of adult development. His methodology involved the extensive use of qualitative methods, such as narratives and interviewing, to paint vivid verbal pictures of lives of his subjects. The intensive nature of this approach limited the number of subjects that could be studied. Surmising that gender would be a critical differentiating factor in the research, and not wanting to further limit the generalizability of findings by segmenting the sample based on gender, Levinson

made the decision to study the genders separately, beginning with men. The result of nearly 28 years of total research was two books: *The Seasons of a Man's Life* (1978) and *The Seasons of a Woman's Life* (1996).

In *The Seasons of a Man's Life*, Levinson analyzed the lives of 40 men ranging in age from 35 to 45 (born in the late 1920s to mid-1930s) from a variety of occupational backgrounds. In *The Seasons of a Woman's Life*, 45 women aged 35 to 45 (born in the late 1930s to mid-1940s) were studied. The women came from three categories of employment: homemakers, corporate-financial employees and academic professionals. The subjects in both studies were interviewed extensively to obtain retrospective data on the experiences of their adult lives. People close to them, including family, friends and co-workers were also interviewed as secondary sources. The goal of the research was to enable each participant to recount his or her "life story" from childhood until adulthood. In homage to Levinson's pioneering work, this type of biographical interviewing technique has since come to be referred to as a Levinsonian study (Lemme, 1995).

What emerged from Levinson's analyses was a model of adult development detailing the eras and periods of human life that follow a predictable, patterned sequence. According to the model, just as the year is divided into separate, discernable seasons, so too does the human life pass through several distinct phases. Levinson proposed that the stages are

sequential, but overlap to some degree, and are not hierarchical; that is, no one stage is more important than any other, nor is any one stage viewed as more advanced than the others.

Furthermore, Levinson's research indicated that both men and women tend to experience the onset of each phase at predictable milestone ages, with little variance. Levinson's model is depicted in Table 4.2. As can be seen, the model identifies four sequential developmental eras, each separated from the next by a developmental transition. The transitions are included in the model to indicate that individuals do not pass instantaneously from one developmental era to the next, but rather that they undergo periods of flux in which they gradually leave one era and enter the next. The small numbers in the diagram represent the modal ages at which Levinson observed the eras and transitions occurring in his samples.

Each developmental era is further divided into a number of phases or "developmental periods" through which the individual passes as he or she is first introduced to, becomes acquainted with and finally masters life in each era of life. Key to Levinson's model is the notion of *life structure*, which is defined as "the basic pattern or design of a person's life at a given time" (Levinson, 1978: p. 41). To Levinson, adult development basically involves the continued evolution of the life structure, based on one's experiences and the ways in which he or she interprets and assimilates them. As one moves through adulthood, encountering

Table 4.2 Developmental Periods in the Early and Middle Adulthood of Men

			4. Late Adulthood	
65			Late Adult Transition	
60			<i>Culmination of Middle-Adulthood</i>	3. Middle Adulthood
55			<i>Age 50 Transition</i>	
50			<i>Entering Middle-Adulthood</i>	
45			Mid-Life Transition	2. Early Adulthood
40			<i>Settling Down</i>	
33			<i>Age 30 Transition</i>	
28			<i>Entering the Adult World</i>	
22			Early Adult Transition	1. Childhood & Adolescence
17				
0				

Source: Levinson (1978), p. 57

new choices and commitments and accepting new social roles and activities, his or her distinct life structure emerges and continues to evolve. Key life events such as entry into an occupation, marriage and starting a family are considered to be some of the major developmental tasks of the life structure, though their relative influence will differ between individuals.

Each developmental era begins with the individual emerging from a period of transition into a period of building, in which the individual makes key choices that will shape his or her life structure for the new era. In entering a new era, the individual faces new challenges and must make decisions about how to

resolve them, defining behaviours and developmental goals that are appropriate to that era. In the middle of each era, a transition period occurs during which the individual reevaluates the life structure that has emerged in the first half of the era, exploring possibilities for change and forming commitment to successful elements of the life structure. In the latter half of a developmental era, the individual experiences a period of reflection as he or she evaluates his or her success in meeting the challenges of the present era, and prepares to enter into a new developmental era. The developmental era comes to a close as the next simultaneously begins, in a destabilizing transition between eras lasting roughly five years. Such developmental era transitions represent the concurrent termination of the culminating life structure from the closing era and development of a new entry life structure for the dawning era.

To illustrate this process, consider a young man, aged 17, who has begun to feel pressures to move beyond his or her adolescent years and enters the early adult transition phase. He is at once apprehensive to leave behind the adolescent ways that he has struggled to master, and excited to be entering the phase of adulthood. As this struggle subsides, he begins to gather information and make choices about the course that his life should take during this new phase of his life. In other words, he is building the foundation for a new developmental era. Half way through the developmental era (at approximately age 30), he enters the mid-era transition period where he begins to take stock of

the choices made earlier in the era and reassesses them, reaffirming some and discarding others. From this process he emerges, some time in his or her late 30s, with a culminating *life structure* for the middle adulthood era. Having defined and refined his life structure in the middle adulthood era, by age 40, the man may begin to find that his life structure, as currently defined, has begun to fall out of line with the realities of his present age. The individual thus undertakes a new transition, this time the major transition of mid-life described in the work of Jung, and the evolution of his life structure enters a new era of evolution.

Levinson (1978, 1996) found that his model of developmental eras and periods held for both men and women, and that the ages corresponding to each period do not differ between women and men. Levinson (1996) noted, however, that there are significant differences in the life circumstances of women and men that lead to differences in the developmental processes that they go through within each era. In other words, while the structure and timing of the developmental eras are similar for men and women, the life structures that they form within those eras differ greatly. Specifically, differences in domestic roles, child rearing activities, educational and occupational opportunities and images of masculinity and femininity cause men and women to define their goals differently within each era, and to use different criteria to judge the appropriateness of their resultant life structures.

Levinson's model has been criticized for the positivistic nature of its age-bound periods (Lemme, 1995). Although his research and the research of others has found evidence to corroborate these milestones (particularly in midlife), it seems overly simplistic to assume that something as complex as psychosocial development could unfold in such a universal pattern. For certain there are developmental tasks and challenges that are likely to coincide with broad age-based milestones, such as marriage, entry into the work force and child rearing, but the significance of these factors and their impacts are certainly not universal. If one takes the stance that age takes on meaning, at least partially through social construction, then age-related norms and behaviour must be a matter of subjectivity to some degree. Consider, for instance the trend emergent in recent decades toward delaying career, marriage and child rearing until later in one's life. Certainly these changes in age norms have a bearing on the pace and timing of developmental periods and transitions. Perhaps if Levinson were to conduct his research in the new millennium, his data might reveal quite a different picture. Nonetheless, his work has been insightful in carrying on the tradition of Erikson and in providing a more vivid illustration of the developmental tasks that the adult undertakes.

Life-cycle models of adult development provide evidence to suggest that the logic underpinning generation theory is missing a crucial element; that of development during the adult years. Mannheim's (1952) generation theory fails

to consider the role of development in adult life, clinging instead to the postulate that the identity of a generation is solidified during its members' formative years. It is not surprising that Mannheim took such a stance, as it is reflective of the prevailing Freudian models of his time. This omission does not deal generation theory a fatal blow, however. Since life-cycle theory contends that the outcomes of one developmental stage impact the outcomes of subsequent stages, then differences in experiences during the formative years of members of different generations will reflect the developmental patterns that emerge throughout their lives. In essence, different generations remain on different developmental courses, owing to the differences in experiences occurring in their non-overlapping historical locations.

Developmental Tasks

Within the confines of cross-sectional research designs, it is impossible to make causal inferences regarding the precise causes of generational values differences and their respective impacts. It is, however, possible to control for life cycle stage by measuring some of the key developmental tasks of adult years. The lifecycle approach described above argues that developmental tasks are generally tied to specific stages of development. If one accepts this notion, then developmental tasks such as joining the working world, finding a spouse and

becoming a parent act as differentiating factors between individuals at different levels of development.

While these tasks are not completed by all people, nor are they necessarily completed within the same developmental stage by all people, the degree of consistency in the prevalence and timing of these tasks allows us to view them as developmental benchmarks. As Ryder (1965) noted, such factors as age-specific legislation, the availability of potential spouses, marital norms, the age of educational completion and the age of labour force entry are societal variables that are tied to specific ages within a social and historical context. In other words, within a societal context, there is a 'normal' progression of developmental tasks that individuals are likely to follow.

Havighurst (1953) enumerated the important developmental tasks of adult life. As seen in Table 4.3, each stage of life brings a new series of developmental tasks for the individual to undertake. Levinson (1978) provides a similar set of developmental tasks that must be undertaken in the process of developing a life structure. Not every individual faces each of these tasks, but they represent typical activities and challenges faced by individuals within each phase of adulthood. While one could easily make additions or deletions to Havighurst's list, or could question the age boundaries attributed to each stage, the majority of tasks remain important to adult life. Including these salient developmental tasks in cross sectional research helps to control for differences in

Table 4.3 Havighurst's (1953) Adult Developmental Tasks

Early Adulthood (18 to 35 years) Selecting a mate Learning to live with a marriage partner Starting a family Rearing children Managing a home Getting started in an occupation Taking on civic responsibility Finding a congenial social group	Later Life (60 years plus) Adjusting to decreasing physical strength Adjusting to retirement and reduced income Adjusting to the death of one's spouse Establishing an explicit affiliation with one's age group Meeting social and civic obligations Establishing satisfactory living arrangements
Middle Age (35 to 60 years) Achieving adult, civic, and social responsibility Establishing and maintaining an economic standard of living Assisting teenage children in becoming responsible and happy adults Developing adult leisure time activities Relating to one's spouse as a person Learning to accept and adjust to middle age Adjusting to aging parents	

developmental stages between subjects, at least to some extent. While the impacts of these tasks may be quite different for members of different generations, given their developmental contexts, it is important to include them in order to analyze their relative impacts on the members of the various generations. Once the influence of developmental processes is controlled for, the portion of generational differences that is genuinely attributable to social change can be better estimated.

4.4 Summary

Mannheim's (1952) theory of generations remains the predominant theoretical exposition of the concept. Mannheim posited that generational differences are the result of the interplay of biological, social and historical factors

and are largely rooted in differing experiences during the formative years of generational groups. He noted that the emergence of discernable social generations is not imminent, and that social and technological changes are prime determinants of whether generations will be actualized. Finally, he noted that generations cannot be viewed as entirely homogeneous social groups, as different 'generation units' will emerge within each generation as manifestations of differing reactions to the same formative experiences faced by all members of the generation.

It was noted in this chapter that, despite a respectable body of literature on the issue of generations, little concrete attempt has been made to operationalize the concept in terms of existing social or psychological variables. Although a variety of terms have been used to discuss the differences between generations, little clarity exists on what precisely denotes these differences. It was proposed that values can serve as a useful underlying construct through which to identify differences in the deepest beliefs of members of different generations. It was further noted that the operationalization of generational boundaries is a difficult task that must be approached in numerous ways.

Finally, the role of adult development in creating generational differences between adult subjects was explored. Mannheim's generation theory is rooted in a model of development strongly influenced the work of Freud, and thus places much emphasis on the importance of childhood as the key developmental period.

It was shown however, that more recent theoretical advances in adult development have illuminated a view of development throughout the entire life cycle. The implication of adult development on the generational hypothesis lies not so much in the way in which generations are defined nor in the differences that are observed between generations, but in the analysis and explanation of those differences. If we subscribe to the life-cycle view of development, it would be argued that the differences observed between two generations are merely reflections of two cohorts passing through different developmental stages at a given point in time.

What is needed is an approach to generations that simultaneously acknowledges the existence of biological life stages and the influence of contextual factors. As a minimum, the key developmental tasks of adulthood must be considered and controlled for in empirical studies of generations. By collecting data on influential aspects in the adult development process that normally emerge within specified life cycle stages, the influence of these factors can be analyzed. Holding such factors constant enables us to look at generational differences without the fear of confounding them with life cycle differences.

5 *Generations, Values and Work*

Employing the theoretical foundations laid out in the preceding chapters, this chapter integrates the concepts of values, generations and work through the examination of characterizations of the generations that now exist in the workforce, as described in the literature. The characterizations of the generations presented in this chapter form the foundation for the research questions presented in chapter seven.

It must be noted before proceeding that there is little theoretical literature related specifically to generational differences in general and work values, and even less empirical evidence on the topic upon which to draw. There is however, a growing body of literature from a variety of sources that provides depictions of the different generations from different perspectives. As might be expected given the somewhat hazy nature of social generations, defining the generational landscape and the respective characteristics of social generations is a highly qualitative task. For this reason, writers on the generational phenomenon tend to hail from varied and far-flung fields of expertise. Social-historians, anthropologists, demographers, pollsters, market-trend analysts and business authors have all contributed to the generational literature from their unique perspectives. While most of this literature is written for practitioners and the popular press rather than for academic audiences, it serves nonetheless as a source of suppositions that can be explored through empirical research.

The popularity of the notion of generation has gained notoriety in recent years, with Douglas Coupland's 1991 novel *Generation X: Tales for an Accelerated Culture* emerging as the iconic representation of a new generational divide in North American society. The recent saliency of generational issues has inspired a proliferation of publications concerning the characteristics of the various generations in our society and the conflicts that are said to exist among them. The works reviewed for this thesis were identified as key references on the basis of citations in media reports and academic texts discussing generational issues. These references are fairly representative of the spectrum of books written on the topic. An annotated bibliography of the generational literature reviewed for this thesis is given in Appendix F.

5.1 Challenges in Describing the Generations

Before exploring the nature of the various generations that comprise our society, two issues presented in the previous chapter must be revisited briefly: the definition of generational boundaries and the role of adult development.

5.1.1 Generational Boundaries

The challenges of defining generational boundaries were discussed in the preceding chapter. This task is made marginally easier in the context of the current research, as the analysis need only be concerned with those adult members of society who are working-aged. Accordingly, only those over the age of 18, the age at which the majority of individuals have completed secondary

education, will be considered. At the other end of the spectrum, individuals older than the normal retirement age of 65 are unlikely to be found in significant numbers in the workforce. It is therefore expected that an upward limit of age 70 should capture most of the older individuals who are still working. The task remains then, to identify the generational groupings that exist within the population of adults aged 18 to 70, or at the time of writing, those people born between the years 1933 and 1985.

If we define a generation as unique social groupings of people sharing the same historical and social location, actualized by the presence of significant social circumstances, then the task remains of identifying these social groupings and the bases upon which they have been formed. Such a review of the social and historical trends of the twentieth century is an undertaking well beyond the scope of this thesis. Instead, the various generational groups proposed in the literature are examined here, followed by an exploration of the relevant work value differences expected between these groups.

Despite the breadth of attention generational issues have received, there is a surprising degree of agreement among commentators regarding the specific boundaries of the respective generations that currently coexist in North American society. Table 5.1 provides an overview of the generational categories proposed by various authors on the topic. Additionally, Figure 5.1 graphically depicts the

Table 5.1 Typologies of Generations

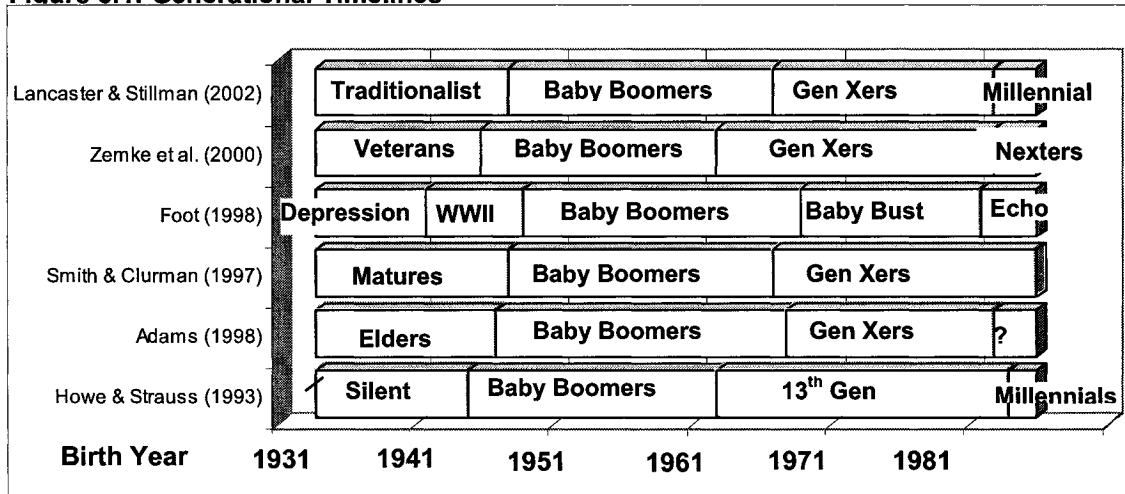
Author	Name Given	Birth Years	Age Span (2002)
Lancaster and Stillman (2002)	Traditionalists Baby Boomers Generation Xers Millennials	1900-1945 1946-1964 1965-1980 1981 - 1999	57 & over 38-56 22-57 21 & under
Zemke, Raines and Filipczak (2000)	Veterans Baby Boomers Xers Nexters	1922-1943 1943-1960 1961-1980 1980-2000	59-80 42-59 22-41 22 & under
Foot (1998)	Pre-World War I World War I Roaring Twenties Depression Babies World War II Baby Boom (Incl. Generation X, born 1961-1966) Baby Bust Babyboom Echo Millennium Busters	1914 & Earlier 1915-1919 1920-1929 1930-1939 1940-1946 1947-1966 1967-1979 1980-1995 1996-2010	88 & over 83-87 73-82 63-72 56-62 36-55 23-35 7-22 6 & under
Adams (1998)	Elders Boomers Gen Xers	Born before mid-1940s 1945-mid-1960s mid-1960s – early 1980s	57 & over 37~57 22~36
Barnard, Cosgrave & Welsh (1998)	Nexus Generation	Early 1960s – Late 1970s	23~42
Tapscott (1998)	Baby Boom Baby Bust Net Generation	1946-1964 1965-1976 1977-1997	38-56 26-37 5-25
Smith & Clurman (1997)	Matures Boomers Xers	1909-1945 1946-1964 1965-?	57-93 38-56 37 & under
Howe & Strauss (1993)	Lost GI Silent Boom 13th Millennial	1883-1900 1901-1924 1925-1942 1943-1960 1961- 1981 1982-?	102-119 78-101 60-77 42-59 21-41 20 & under

timelines of the generations as proposed by the various authors. As can be seen, although there is variation in the specific birth years chosen as divisions

between the generations, generational lines are drawn fairly consistently across authors.

With the exception of Foot (1998) (whose generational boundaries are based solely on Canadian birth rate trends rather than social events), there is general agreement amongst authors that the first significant generational boundary in today's workforce is drawn in the early- to mid- 1940s, corresponding with the end of the Second World War. Most authors are in agreement that social, economic and historical conditions changed so dramatically following the end of the War that one cannot deny the existence of a generational punctuation corresponding to that time. Accordingly, the first generational divide employed in the present study will be positioned at 1945, which corresponds to the midpoint between the highest and lowest boundary dates for this generation shown in Table 5.1.

As Figure 5.1 shows, the second generational boundary, between the Baby Boom generation and the generation that followed (referred to here as 'Generation X'), is generally set in the early- to mid- 1960s, depending on the author. As will be seen, this boundary is commonly linked to the decline in birth rates that signaled the end of the baby boom, which occurred at different times in Canada and the United States. Because the 'punctuating event' that separates

Figure 5.1: Generational Timelines

the generations is in this case quite vague, there is a greater degree of disagreement about when Generation X actually began. For the purposes of the present research, the boundary between the Baby Boomers and Generation Xers, is set at 1962, which corresponds to the midpoint between the highest and lowest boundary dates suggested by the various authors, as shown in Table 5.1.

The boundary separating Generation X and the successive generation is generally believed to correspond to the rise in birth rates in the early 1980s, when the majority of Baby Boomers began to have children. The genealogical link of this generation to the Baby Boomers gives this last generation its name – the Baby Boom Echo. As with the previous generational boundary, this one is fairly ambiguous, as it is difficult to determine a precise year when the Boomers began to have families. For this reason, authors vary in their estimations of the front-end of this generation. For the purposes of this research, the boundary

between Generation X and the Baby Boom Echo is set at 1980, which corresponds roughly with all of the authors cited in Table 5.1.

The four generations that comprise the current workforce, as defined for the purposes of this thesis, are shown in Table 5.2.

5.1.2 Generations and Adult Development

As noted in the preceding chapter, generational analysis must take into account not only the social conditions that create generational identities, but also the developmental processes that affect the progression of individuals throughout their life cycles. Recall that Levinson (1978) defined the concept of *life structure* as the “the basic pattern or design of a person’s life at a given time” (p. 41).

While Levinson (1978) gives only passing attention to the roles of values and other psychological variables in shaping the life structure, it stands to reason that values, as criteria used to judge preferable behaviours and end goals of existence, must play a significant role in the shaping and evolution of the life structure. Although the relationship between changes in the value system and life structure have not been theoretically investigated, it is worthwhile to explore value differences that correspond to theorized turning points in the life structure.

Therefore, in the sections that follow, the various generations will be discussed not simply as social groups, but with specific reference to the life-cycle stages they are currently encountering.

As shown in Table 5.2, each of the generations considered in the present research currently consists of individuals passing through unique developmental

periods. It is interesting to note that at this point in history the ages of the various generations as defined in the literature correspond roughly with the age boundaries of developmental periods outlined by Levinson. For instance, the Echo generation is currently aged 23 and younger, which corresponds to the age boundaries of the early-adult transition. Furthermore, each of the generations inhabits a separate developmental era (i.e. adolescence, early adulthood, middle adulthood, late adulthood) except for the baby boomers and the mature generation, who are experiencing different periods within the middle adulthood era.

An Overview of the Generations

The sections that follow outline the various generations as they have been operationalized for the purposes of the present research. Each of the generations is discussed with reference to the historical events and social conditions prevalent during their formative years, their prominent general and work values as depicted in the literature, as well as the present developmental stages of their members.

Table 5.2 Generations and their Developmental Periods

Generation	Developmental Periods
Mature Generation <ul style="list-style-type: none"> • Born 1945 & earlier • Aged 58 and older 	Late Adulthood (age 65+)
	Late Adulthood Transition (age 60-65)
	Culmination of Middle Adulthood (age 55 to 60)
Baby Boomers <ul style="list-style-type: none"> • Born 1946 to 1961 • Aged 42 to 57 	Culmination of Middle Adulthood (age 55 to 60)
	Age 50 Transition (age 50 to 55)
	Entering Middle Adulthood (age 45 to 50)
	Mid-Life Transition (age 40-45)
Generation X <ul style="list-style-type: none"> • Born 1962 to 1979 • Aged 24 to 41 	Settling Down (age 33-40)
	Age 30 Transition (age 28-33)
	Entering the Adult World (age 22-28)
The Echo <ul style="list-style-type: none"> • Born 1980 & later • Aged 23 & younger 	Early Adult Transition (age 17-22)

5.2 Matures: Born in 1945 or Earlier

Table 5.1 shows that all of the authors cited draw a generational boundary in the early- to mid-1940s, close to the end of World War II. The generation born before this boundary, which we will label the “Matures,” is comprised of the oldest members of the present workforce, those aged 57 and older at the time of this study. This group accounted for roughly 21% of Canada’s population in 2001, with about 55% of them being between the ages of 56 and 69. Matures comprised approximately 23% of the Canadian labour force in 2000.⁹

⁹ All population estimates are from Statistics Canada CANSIM II Table 282-0002. The figures presented are approximate, as the Statistics Canada population statistics are aggregated into

5.2.1 *Formative Context*

The Mature generation is comprised of those individuals born during or following the Great Depression, who were too young to have fought in WWII, but experienced the War as young observers. This generation, which includes the small cohort of wartime babies, lived in the shadow of the Veteran generation who fought in WWII. They are therefore referred to as the “Silent Generation” by some authors (e.g. Howe & Strauss, 1993), as they had much less opportunity to contribute in a meaningful way to the history-shaping events of the 1940s, but acted rather as passive observers.

The Matures did, however, benefit more than other cohorts from the reconstruction that followed WWII. As they entered adulthood and thus the work force in the 1950s, they had the opportunity to capitalize on the economic activity that marked that era. As the front end of the Mature generation entered the labour market in the 1950s, its members faced unemployment rates much lower than those seen by Boomers, Generation Xers, or the Echo generation at the same age¹⁰. Since Matures attained a greater degree of education than their predecessors did, they were uniquely positioned to fill the administrative and professional roles that were in high demand during the post-war rebuilding (Smith

age-bands that do not correspond precisely to the generational boundaries specified here. Therefore, estimations have been made of the allocation of members to each birth year.

¹⁰ Source: Statistics Canada historical unemployment data, Series D223-235.

& Clurman, 1997). Thus, this generation experienced a wealth of opportunities in the post-war economy and had a relatively easy time securing employment as they entered the workforce as young adults.

Based on birth rate trends, Foot (1998) separates the Matures into two smaller generations—the 'Depression Babies' born between 1930 and 1939, and the 'World War II' generation, born between 1940 and 1946. The Depression babies represent a small cohort of individuals born during the Great Depression, when few families could afford to have children. This group entered the work force in the economic boom years following WWII, and as a small cohort, faced relatively little competition for jobs and promotions. Coming to adulthood in an age of prosperity, they were able to afford to raise relatively large families. Thus, along with the slightly older returning veterans, this age group was responsible for the high birth rates that precipitated the Baby Boom.

Foot's (1998) World War II generation is comprised of those individuals born during the War. The fertility rate (the number of births per woman) increased during these years, resulting in a cohort somewhat more densely populated than the one that preceded it. Foot (1998) attributed the rise in fertility rates during WWII (which is the opposite of what occurred in WWI) to the economic upturn that accompanied the War, as well as the fact that individuals who had postponed parenthood throughout the Depression could no longer do so, for purely biological reasons. This cohort gave birth to the relatively smaller generation following the baby boom.

Despite Foot's (1998) demographic evidence to support the splitting of the Matures into two generational cohorts, the categorizations presented by the other authors do not support this distinction on the basis of values differences. In any event, since 'Depression Babies' are relatively few in the current labour force, it is the latter cohort of 'War-time Babies' that are of most interest in this thesis. The Matures will therefore be considered as a single group for the purposes of this thesis, despite the distinction made by Foot (1998).

5.2.2 Prominent Values of the Matures

On the basis of the empirical analysis of their social values data, Smith and Clurman (1997) argue that the Matures are very similar in their values to the GI generation that preceded them, although their formative experiences differed greatly from those of their predecessors. This finding may appear to be antithetical to the notion of generational development developed thus far in this proposal. Recall, however, that Mannheim's theory acknowledges the possibility of intermediate, or 'buffer' generations that have a rather muted identity relative to the generations between which they are positioned. Howe and Strauss (1993) argued that the Matures constitute such a generation, nestled between the influential 'GI' generation and the massive 'Baby boom' generation. They note, "They were born too late to be authentic G.I.-style war heroes, with all that outer-world hubris—and too soon to share fully in Vietnam-era rage and youth rebellion, with all that inner-world smugness" (p. 39). They argue that, without a strong generational identity of its own, the Silent generation had to choose

between the identities of either of the generations on either side of it. Zemke, Raines and Filipczak (2000) argued of this 'sandwich generation', "They don't feel worthy of accepting the mantle the older cohort wears so proudly. Yet they can't identify completely with the Boomers who came along just behind them" (p. 35). If this is indeed true, then the differences observed between the late-Matures and the early-Boomers may not be pronounced.

Despite the purported differences among Matures, the literature suggests that they share a number of common values. The research of Smith and Clurman (1997) presents a picture of the Matures as more cautious and quietly assertive than the preceding GI generation. Their research characterizes the Matures as a generation that values hard work, supposedly stemming from their involvement in the rebuilding of society following the War. Matures are also said to be more willing than younger generations to sacrifice their present comfort in exchange for future rewards. The objective of this self-sacrifice, it is argued, has been the future well being of their children and later, their grandchildren (Howe & Strauss, 1993). Adams (1998) argues that the value placed by the Matures on the deferral of gratification was imbued in them through their acceptance of and devotion to organized religion, and is tied strongly to their belief in the rewards of the afterlife. He notes that this value is notably weaker in subsequent generations, owing largely to a continuous historical decline in religiosity.

A number of authors have posited a strong predilection toward self-sacrifice in the Mature generation (Howe & Strauss, 1993; Adams, 1998; Zemke

et al., 2000). However, Howe and Strauss (1993) argue that this value is notably weaker amongst the youngest members of the generation. They suggest that the self-sacrifice of the older GI generation and older Matures for the sake of their children created a new generation accustomed to indulgence—the Baby Boomers. By the time the youngest members of the mature generation entered adulthood, they had had ample opportunity to observe the Baby Boom generation enjoying the spoils of their parents' sacrifice. Howe and Strauss (1993) argue that the youngest Matures began to question the prudence of self-sacrifice for the benefit of a self-indulgent younger generation who viewed the rewards of their parents' sacrifice as an entitlement. The result, they argue, was a movement away from self-sacrifice towards hedonistic self-indulgence among those at the tail end of the mature generation. This corresponds to Adams's (1998) observation of a hedonistic generation unit comprised of younger matures, as will be discussed below.

Adams (1998) characterizes the Matures as sharing a belief in authority, discipline, the Judeo-Christian moral code and “the golden rule: do unto others as you would have them do unto you” (p. 59). He further notes that the extraordinary events of the Matures' formative years—war, depression, and disease—shaped their view of the world, as events of great significance were the result of the forces beyond their control. He argues this resulted in the Matures' acceptance of ‘black and white’ absolutes, both good and evil. How else could

young minds have made sense of such devastating events other than to ascribe them to mystical forces, both benevolent and malevolent?

Smith and Clurman (1997) depict the Matures as a group that exhibits a variety of unique values. First, having seen the utility of teamwork in dealing with the political and economic challenges that prevailed in their formative years, the Matures display a strong value of teamwork versus independence. After all, they argue, it was through cooperation and mutual sacrifice that the Great Depression and the War were confronted. Also, as strong central institutions were key to organizing programs of action to deal with these challenges, the Matures are depicted as a group that values authority and is willing to defer to authority figures and those with the expertise needed to solve problems. With the strong GI generation ahead of them, it seems plausible to assume that the younger matures became willing to defer to authority figures.

Zemke, Raines, and Filipczak (2000) argue that the Matures value tradition. Matures are said to reflect with pride upon the achievements of the past and see them as integrally linked to the present and the future. More than any other living generation, they view the past as a 'golden age' of strong social, family and work values. In the words of Zemke et al., they are "past-oriented and history absorbed" (p. 39).

5.2.3 Work-Related Values of Matures

With respect to work, Zemke, Raines, and Filipczak (2000) argue that Matures value loyalty, dependability and persistence. They therefore value

loyalty and dedication to one's job and company, placing a stigma on job-changing (Lancaster & Stillman, 2002). Matures frame their expectations of the employer-employee relationship in terms of 'an honest day's work for an honest day's pay,' and view a job as a responsibility, not as an entitlement. They have valued deference to authority in the workplace, assuming that they would someday, through diligence and loyalty, rise to a position of authority themselves. Nonetheless, Smith and Clurman (1997) argue that the Matures are comfortable with the higher degree of academic and technical knowledge attained by younger generations, valuing the wisdom that comes with their own experience over the merits of formal education. Adams (1998) argues that Matures place importance on status symbols, not so much as a means of reflecting wealth, but rather as reflections of the achievement of having progressed up the social ladder through hard work. Lancaster and Stillman (2002) argue that the primary career objective of this group has been to 'build a legacy,' a lifetime career in their organizations or professions.

The Matures are more likely than any other generation to value work as an end in itself rather than as a means to an end and to view satisfaction in a job well done as the ultimate reward for their efforts (Zemke et al, 2000, Lancaster & Stillman, 2002). Zemke, Raines and Filipczak (2000) argue that the Matures are

Box 5.1 Fundamentals of the Mature Generation
<p><u>Formative Influences</u></p> <ul style="list-style-type: none"> • Stock Market Crash and the Great Depression • The “New Deal” • World War II • The Atomic Bomb • Post-War reconstruction <p><u>Core Values</u></p> <ul style="list-style-type: none"> • Cautious • Self-sacrifice and deferral of rewards • Building for a better future • Religiosity • “Black and white” worldview • Traditional • Nostalgic • Deferent to authority • Teamwork <p><u>Work Values</u></p> <ul style="list-style-type: none"> • Hard work is its own reward • Loyalty and Tradition • Dependability • Persistence • Hard work and long hours • Wisdom and experience over technical knowledge • Work-life balance is a personal issue • Authoritarian leadership style

authoritative and directive as managers, valuing discipline over flexibility—values that they see as essential to effective leadership as they have known it. They also note that while Matures implicitly understand the value of teamwork, their vision of teams does not reflect values of equality and democracy, particularly where younger

co-workers are concerned. Lancaster and Stillman (2002) note that this generation is often frustrated and even offended by what they view as an informal approach to work and a lack of protocol displayed by younger co-workers. The Matures also view younger generations’ desire for equality in the

workplace as an affront, having worked their way up 'the corporate ladder,' and expecting that younger generations should pay their dues in a similar manner (Lancaster and Stillman, 2002).

Zemke et al. (2002) note that the Matures value rational logic over emotion, which impacts on their decision-making, communication and management styles. According to Lancaster and Stillman (2002), this rational approach carries over to the Matures' view of work-life balance as a personal issue to be resolved by individual employees, rather than as a practical business concern.

The work values ascribed to the Mature generation are summarized in Box 5.1. Many of these work values can be recognized as elements of the Protestant work ethic (PWE) as specified in Chapter three. If the portrait of this generation painted by the various sources considered above is true, then this generation should show adherence to the principles of the PWE; namely hard work, frugality, deferral of rewards and self sufficiency.

5.2.4 Developmental Stages of Matures

In terms of Levinson's stage model, members of the Mature generation presently occupy three stages in the adult development cycle. The youngest members of the generation are currently concerned with the development of the culminating structure of the middle adulthood era. Having recently emerged from the age-50 transition, when the initial life structure of middle adulthood was re-

evaluated, individuals in the final stage of middle adulthood focus on creating new life-structures to carry them through the remainder of middle-adulthood. This is a time of relative stability in the life cycle as the individual settles into a culminating life structure for the middle adult years.

Those matures aged 60 to 65 face the challenges of the late-adult transition, as they wind down their involvement in the world of work and prepare themselves mentally for the era of late adulthood they are about to enter.

The oldest group of matures, those older than 65 years of age, have begun to enter the era of late adulthood and are facing the task of building a new life structure that is appropriate to their advanced age. As senior citizens, they are tasked with separating themselves from the world of work and establishing a post-career identity for themselves (Feldman, 1987).

The implications of developmental stages for this generation is that they face a reflective period in which they will seek to make their mark in the organization and leave behind a legacy. They will be less concerned with opportunities for the future than with reflection on the past. Accordingly, their values in the workplace will not be motivated by aspirations for future advancement, so much as leaving behind a mark of their contribution. In keeping with the concept of generativity, they are likely to be concerned less with self-interests and more with well-being of the organization in their future absence and in the interests of their younger peers, for whom they wish to play a mentoring role (Levinson, 1978, Feldman, 1987).

5.3 Baby Boomers: Born 1946-to 1961

As noted previously, Mead (1978) has argued that 1945 was a historical turning point or punctuation in history, as it marked the end of one era and the dawn of the 'Nuclear Age.' As illustrated in Figure 5.1 all of the authors that have offered generational typologies are in agreement about the title given to generation that followed WWII—the Baby Boomers. As Foot (1998) has noted, the baby boom has been the key demographic event of the century. Soaring birth rates in the post-war period created a large cohort of people born in a relatively short span of time. In Mannheim's (1952) terminology, the baby boom created the precipitating factor for the formation of a generational divide—a massive cohort of individuals sharing a relatively small generational location. The combination of demographic phenomena that created the baby boom has in many ways determined generational issues in the latter half of the twentieth century. All current generations have in some way been affected by the baby boom, either directly or indirectly through their reactions to the values of the Baby Boomers.

Currently, the Boomers represent approximately 24% of Canada's population, and about 30% of the labour force¹¹. While it is not the largest generation in size, it is the most densely populated generation, as it spans fewer years than do any of the other generations. In other words, more Boomers were

born in each of their generation's birth years than in any of the birth years of other generations. Foot (1998) notes that the fertility rate, which is currently 1.6 children per woman¹², averaged 4.0 births per woman in the early 1960s. He also notes that the Baby Boom was more pronounced in Canada than in the United States, Australia and New Zealand, the only other countries to experience such a demographic trend.

5.3.1 Formative Context

Most authors on generations concur that the key formative experience of the Boomers was the economic affluence and growth of the post-war period in which they grew to adulthood. As their parents, who were mainly members of the Veteran generation, strove to build a better world for their children, the children themselves experienced a period of prosperity that was unprecedented for older generations, who had suffered through economic depression and world war throughout their formative years. As the crest of the boom (birth year 1961 in Canada) hit, the oldest members of the generation were preparing to enter the labour force, just in time to benefit from a booming consumer market fueled by the enlarged population of children. Armed with the highest level of education of any generation to date, the Boomers eased into an expanding job market (Foot, 1998).

¹¹ Estimated percentage of the labour force is from Statistics Canada's CANSIM system, and are for the year 2000.

Howe and Strauss (1993) argue that the early Boomers are fortunate to have experienced youth at a time in history when youth was treasured in North American society, and they benefited from an elder generation intent on creating improved conditions for the next generation. Zemke, Raines and Filipczak (2000) concur, describing Boomers as “Healthier. More wanted. Doted on and attended to. The first generation in which child rearing was a hobby and a pleasure and not an economic necessity and a biological inevitability” (p. 64). The Boomers were, after all, a generation of children for whom the GI generation had fought and won a bloody and prolonged war. Post-war North America brimmed with possibilities and the wave of Boomer babies were the intended benefactors of this new era of prosperity.

Howe and Strauss (1993) argue that the sense of ingratitude, indifference and entitlement with which the young Boomers viewed the hard work and self-sacrifice of previous generations flew in the face of Mature values. As they grew older, the Boomers therefore gained a reputation as spoiled, arrogant and disrespectful. Howe and Strauss argue that this prompted some of the later Matures to question the values of self-sacrifice and deferral of rewards propagated by their coevals, and to eventually abandon these values in favour of the self-serving hedonism that they saw being practiced by the younger generation. After all, if young people did not care about sacrifice and deferral,

¹² Source: Statistics Canada, *Fertility projections for Canada, provinces and territories, 1993-2016* Catalogue Number: 91F0015MPE96001

then why should they? It is Howe and Strauss's (1993) position that this shift toward self-indulgence created an atmosphere of pervasive apathy for the young of subsequent generations, as older Matures found the hedonism of the Boomers morally reprehensible, and the Boomers showed little concern for people other than themselves. This notion of a sudden shift in attitudes regarding future generations will be discussed in a subsequent section of this chapter.

The literature suggests that the key formative influence for the Boomers was the size of their demographic cohort. Foot (1998) argues that the sheer number of young people in North America in the 1960s exaggerated the prevalence of certain youth characteristics. For instance, he argues that only a small proportion of Boomers was associated with the "hippie" movement, yet with such a large cohort, this small proportion translated into a large number of people. The Boomers' strength in numbers also resulted in young people having an unprecedented degree of control in the evolution of the North American culture. Notably, it was the influence of a large youth population that culminated in the emergence of rock and roll music as a major cultural influence that had grown to be hegemonic by the end of the century.

The sources reviewed here suggest that many important historical events of the Boomers' youth can be viewed as divisive influences from a generational perspective. The assassinations of progressive leaders (e.g. John and Robert Kennedy) and civil rights leaders (e.g. Martin Luther King) were particularly salient to the change-oriented youth. The Watergate scandal in the US

exacerbated young people's growing discontent with authority and large institutions. Perhaps the most poignant example of generational divide came with the United States' involvement in the war in Vietnam, which involved the conscription of Boomer men to fight a war that was supported mainly by older generations (the US president at the time, Richard Nixon, was himself a member of the GI generation). More than any other historical event, the Vietnam war deepened the divide between Boomers and older generations in the US (Zemke et. al., 2000).

Adams (1998) notes that the majority of historical events of significance to North Americans during the Boomers' formative years occurred in the United States. Canadians growing up in this period experienced the events listed above, as well as the moon landing, the Cuban missile crisis, and race riots in the United States, as more or less passive observers. But Adams contends that these events had significance to Canadian youths as well, as the Baby Boom had created a generational connection that crossed national borders. This sentiment is reminiscent of Mead's (1978) assertion that the generation gap between Boomers and older generations created a youth culture uniting like-aged individuals worldwide.

However, as with the Matures, the literature suggests that there are differences between younger and older members of the Baby Boom generation. It is argued that the earliest members of the Baby Boom generation were born at the right time to reap the benefits of a large birth cohort. Foot (1998) notes that

those people born at the front-end of any large cohort, such as the earliest wave of Boomers, are well positioned to find work in an economy that must provide goods and services, education and health care to a large cohort of youths. However, those born later in a large cohort, like the tail-end Boomers, experience a quite different reality. Those Boomers unfortunate enough to have entered the workforce at the tail end of the baby boom faced a highly competitive, saturated economy with decreased opportunities, as the demand for services decreased with reduced birth rates, and existing jobs had already been filled by slightly older members of the cohort.

So for those born late in the Baby Boom, prospects were not as good, which is reflected in less-Boomer-like values amongst the late Boomers (Foot, 1998; Adams, 1998; Zemke, Raines & Filipczak, 2000). It must be noted however, that the formative experiences of the tail-end Boomers are not viewed by most generational authors to be sufficiently different as to constitute a generational boundary between them and earlier Boomers. However, as the opportunities for young people continued to decline in the late 1970s and early 1980s, the sustained period of poor opportunities for young people did coalesce into a generational boundary, giving birth to the term Generation X. This set of circumstances will be discussed in greater detail below. It is worth noting at this point that the Baby Boom generation came to a close in this rather hazy way—not with a historic punctuation, but with a prolonged period of decaying opportunities for youth. This problem is evident in the lack of consensus on a

clear boundary date for the Boomer cohort among the authors considered here (refer to Table 5.1).

5.3.2 Prominent Values of the Baby Boomers

Smith and Clurman (1997) argue that the affluence of the period in which the Boomers grew up provided them with a “strong sense of entitlement, and enormous expectations about the potential of life” (p. 45). They argue that Boomers have a sense that economic growth and prosperity is the norm and that downturns in the economy are merely cyclical anomalies. This differentiates Boomers from older and younger generations, for whom economic depression and recession were key formative influences. Smith and Clurman (1997) posit, “With the belief that their future was secure, there were few economic worries to distract them, so Boomers felt free to focus instead on themselves, on experimentation, on fulfillment” (p. 46). Being relieved of concerns for economic survival, Boomers were thus able to focus on consumption and hedonistic experience rather than on saving for the future. Freedom from survival needs also allowed them to focus on less tangible issues like anti-war protest, feminism and civil rights (Adams, 1998).

The generational literature reviewed for this thesis provides a stereotypical profile of Boomers as a self-absorbed group of non-conformists who enjoy breaking with convention and rebelling against establishment. They are purported to have strong feelings about what is right and wrong and are nostalgic about the ‘good old days’ of their youth when everything was simpler, people had

convictions, society had strong cultural icons to look up to, and the music was better. They are painted as a group who blames society's ills on others—on the corrupt officials of their parents' generation (Richard Nixon being a popular target) and on the generation that followed them, which they view to be unmotivated and morally bankrupt. They are also portrayed as optimistic—they feel that the world's ills are curable, if only older and younger people would be a little more like them. They are seen to be focused on health and wellness, actively trying to maintain their youth and vitality. They are also argued to be interested in personal growth and development, wanting not just the material benefits of hard work, but also

Box 5.2 Fundamentals of the Baby Boom Generation

Formative Influences

- The "Atomic Age"
- Large demographic cohort
- Economic prosperity
- Child-friendly culture
- Civil rights movement
- Assassinated American Figures
- Communist threat (Asia, Russia, Cuba)
- Birth control pill
- Lunar landing
- Vietnam war
- Rock and Roll

Core Values

- Optimism
- Entitlement
- Hedonism
- Self-fulfillment
- Non-conformist
- Experimental
- Objective sense of right and wrong

Work Values

- Work is a means to fulfillment
- Status is a key reward as it symbolizes achievement
- Workoholism
- Acceptance of stress
- Team-oriented
- Importance of title/status symbols
- Demanding of respect and sacrifice from subordinates

enlightenment, self-fulfillment and spirituality. The most prominently identified value of the Boomers in the literature is their indulgent and hedonistic pursuit of self-interests. Zemke, Raines and Filipczak (2000) say of the Boomers, "They have pursued their own personal gratification uncompromisingly, and often at a high price to themselves and others" (p. 67). It is this value of instant gratification and unwillingness to sacrifice pleasure for the sake of the future that earned the Boomers a dubious reputation as "the Me Generation."

While the caricature presented above is an exaggeration, it is fairly representative of the image of the Boomers that is portrayed by the authors noted in Table 5.1. Boomers are generally depicted in a negative light in generational literature and it is argued that they are viewed with resentment by members of the other generations. In particular, the relationship between Boomers and Generation Xers is portrayed as acrimonious, with Boomers viewing Gen Xers as a group of cynical 'slackers', and Gen Xers viewing Boomers as sanctimonious egomaniacs. Howe and Strauss (1993) argue that "Boomers in the media waste no occasion to describe how superior they are to the pile of demographic junk they see in their rearview mirrors" (p. 42). In the quintessential *Generation X: Tales for an Accelerated Culture*, Douglas Coupland aims much of his characters' frustrations at the Boomers, whom they view as self-absorbed, self-indulgent and self-aggrandizing. As will be explored in a subsequent section, this turbulent relationship has been a critical formative influence for Generation X.

5.3.3 *Work-Related Values of the Boomers*

Boomers are more strongly represented in the workforce than the Matures before them, not only because they are still below the age of retirement, but also because Boomers were the first generation to have significant female participation in the workforce. This gives them a prominence in the workplace relative to the other generations.

As shown in Box 5.2, Boomers are seen to be relentlessly hard working, and expecting of the same level of commitment from younger employees. The over-achieving and highly materialistic “yuppie” stereotype of the 1980s professional is often applied to the Boomers as a whole. Boomers are thus portrayed as over-stressed workaholics who are obsessed with power, material possessions and professional advancement, often at the expense of their personal and family lives. The stereotype suggests that things such as family, relationships and marriage are viewed by the ambitious Boomers as potential obstacles to success that must be managed in order to keep them from negatively affecting one’s career. Lancaster and Stillman (2002) state, “for a lot of Boomers trying to stand out from the crowd and competing for the same jobs, workaholism became a badge of honour” (p. 99). With such a strong focus on hard work and achievement, Boomers have had more difficulty than younger generations in balancing work and family. Lancaster and Stillman (2002) note that the Boomers have been unwilling to accept the notion of a work-family trade-

off, instead seeking ways to have it all – a highly successful career and a highly rewarding family life.

Boomers are said to be driven and service-oriented as employees, and they are eager to please and to 'go the extra mile' in their jobs. They view work as central to their lives and derive personal fulfillment from work more than do any of the other generations (Lancaster & Stillman, 2002). Their focus has been on building a 'stellar career,' aiming to amass impressive lists of achievements and to rise to positions of status in their organizations(Lancaster & Stillman, 2002). For this reason, Boomers have viewed frequent job change as a poor strategic career move, preferring instead to build a strong reputation in one organization before considering a move to another (Lancaster & Stillman, 2002). Boomers are also said to be comfortable with organizational politics and to function well in a team setting. On the negative side, however, Zemke et al. (2000) argue that Boomers are self-centred and judgmental of others who see things differently, particularly when dealing with younger employees. Zemke et al. further argue that as leaders, the Boomers outwardly advocate a participative and democratic workplace, but their actions often reveal a "benignly despotic style" (p. 79). They state that "Boomer managers sometimes have a hard time actually practicing, day in and day out, the management style they profess. Many, for instance, truly believe they are managing participatively, when, in fact, they're just giving it lip service" (p. 79).

In terms of specific work values, the literature suggests that Boomers seek challenging work, public recognition, opportunities to prove themselves, status symbols that represent their success and distinguish them from their colleagues, and rewards for hard work and long hours. Boomers may value work-life balance because it is something they desperately seek, and they are therefore likely to value any reward that provides them help in managing their busy lives (Lancaster and Stillman (2002).

5.3.4 *Developmental Stages of Boomers*

In terms of developmental stages, the Boomers are currently experiencing the various stages of the middle adulthood era. The youngest Boomers are experiencing the turbulent mid-life transition. In this period they will reassess the values and commitments of their adult lives, and because of the heightened awareness of mortality that accompanies mid-life, they are likely to feel that their opportunities to make major changes in their lives are dwindling (Feldman, 1987). This transitional period involves a process of *individuation*, where the individual reflects on the personal meaning for him or her making the psychological transition from 'young' to 'old' (Levinson, 1978). Through a process that Levinson (1978, 1996) refers to as "modifying the dream," the individual takes stock of his or her accomplishments thus far in comparison to his or her dreams of young adulthood, and gradually comes to accept a more realistic dream that is reflective of his or her experiences to date.

Older Boomers are currently in the late middle-adulthood era, which is mainly concerned with the development and refinement of a life structure that is appropriate for the second half of the individual's life. Major concerns of this era include, for many people, building a deeper relationship with one's spouse as adult children leave home and building a new relationship with adult offspring. For many Boomers, the present time is one of rediscovering themselves outside of the role of parent to dependent children, and dealing with the freedom that comes with this new stage (Levinson, 1978, Feldman, 1987).

With respect to work, the Boomers face a number of issues endemic to their life-cycle stages. Feldman (1987) argues that those in the mid-life transition stage are faced with two main challenges, those of: reassessing their progress relative to the ambitions they held in the early adulthood era and resolving conflicts between their working lives and their personal lives. Older Boomers are faced with the challenges of dealing with the energy and competitiveness of younger workers progressing through the hierarchy and learning to incorporate their accumulated wisdom into their work, substituting it for their technical skills, which may be growing outdated (Feldman, 1987). These challenges suggest that Boomers are likely to place less importance on such developmental aspects as training and advancement, and more emphasis on authority, centrality to the organization and the ability to use their accumulated experience to achieve results.

5.4 Generation X: Born 1962 to 1979

In the wake of the baby boom came the much maligned generation known commonly as 'Generation X.' The irony of this moniker is that novelist Douglas Coupland, who coined the term in his book *Generation X*, meant it to be symbolic of this generation's lack of identity. The term has since been commandeered by commentators, often from other generations, and applied in a rather pejorative manner to speak about the post-boom generation. This generation has received a great deal of media attention over the past decade, and has been the focus of countless articles and books. The wealth of material written about the Boomer-Generation X chasm provides abundant sources for the present discussion.

Unfortunately, there is much confusion in the popular press surrounding the precise definition of who exactly comprises Generation X. The media has perpetually used the term to describe people under the age of 30 (alternatively referred to as *twenty-somethings*) despite the fact that the characters in Douglas Coupland's novel would be currently reaching age forty. Even among academics there is some disagreement and confusion. For instance, Burke (1994a, 1994b) operationalizes Generation X as individuals between the ages of 20 and 29. Based on birth rate trends, Foot (1998) sets the boundaries of Generation X as 1961 to 1966, making it a subgroup at the tail end of the Baby Boom. Foot distinguishes Generation X from what he refers to as the 'Baby Bust generation', born between 1967 and 1979. Others have ascribed various boundaries to the

generation, generally beginning somewhere in the early- to mid-1960s and ending somewhere in the late-1970s to early-1980s.

While the birth rate trends may signal a birth cohort boundary in 1966 corresponding to the end of the boom in Canada, the other authors cited in Table 5.1 make no such distinction, suggesting that the decline in birth rates was not a sufficiently important factor to generate a generational boundary. As Figure 5.1 shows, all other authors consider the generation following the Boomers to stretch until the late-1970s to early-1980s. Thus, for the sake of this analysis, it will be assumed that the experiences of Generation Xers and Baby Busters as defined by Foot (1998) were sufficiently similar as to merit their consideration as a single generation, which will be referred to in this paper as Generation X, despite the drop in birth rates in the mid-1960s.

Generation X, defined in this thesis as those born between 1962 and 1979, currently comprises around 27% of the Canadian population and about 34 of the Canadian labour force¹³. However, since the generation spans 17 birth years, it is not as highly condensed as the Baby Boomer generation.

5.4.1 Formative Context

Characterized by the popular media as a generation of disenfranchised and sarcastic underachievers, this group lived its formative years amidst grim conditions that included recessions, cold war, corporate downsizing and the

¹³ Again, the labour force statistic cited here refers to the year 2000.

emergence of such threats as AIDS and the environmental decay of the planet. The generational literature generally suggests that the values of the Xers were largely defined in opposition to those of the Boomers, whom Xers view as a source of many of the problems of their formative years. Howe and Strauss (1993) refer to Generation X as the 13th generation, in reference to the fact that they are the 13th generation born in the history of the United States. They argue that this generation was deprived of many of the opportunities that were available to previous generations, and liken their experience to arriving at the beach just in time to miss the end of the party, but left with the mess to clean up (p. 6).

Specifically, Generation Xers missed the economic prosperity and favourable employment conditions that were enjoyed by the Boomers. Instead, they bore witness to economic turmoil, from the recession of the early 1980s that affected its oldest members as they entered the labour force, to the recession of the early 1990s that affected its younger members. This generation was also witness to the persistently high levels of unemployment and inflation that plagued North America in the intervening years. Generation Xers also experienced the corporate downsizing trend that affected first their parents, then them via reduced job opportunities. It is frequently argued that the economic realities of the 1980s forced Gen-Xers to remain in university, accept low paying service jobs, and move back in with their parents in order to survive their early adulthood. Smith and Clurman (1997) summarize this situation by stating, "Xers are the generational cohort that's never been able to presume success" (p. 81).

The literature also suggests that the Xers have paid the price for the exorbitant government spending of the 1960s and 1970s, through heightened taxes and government program cuts in the 1980s and 1990s. These cuts paradoxically coincided with a number of pressing public policy concerns, such as the threat of environmental decay and the AIDS epidemic. The Xers' legacy, they quickly learned as young adults, was to inherit a snowballing national debt and the responsibility for solving a host of long-term problems, which also included maintaining the health care system and pension system that they learned were ill-prepared for the inevitable aging of the population.

Barnard et al. (1998) argue that this generation has been further shaped by the rapid pace of geo-political change that occurred in its formative years, including such monumental events as the fall of the Berlin Wall, the end of the cold war, the dissolution of the former Soviet empire, and end of the Apartheid system in South Africa. The impacts of these global changes were heightened by the ubiquitous coverage of cable television and satellite broadcasting, which made it possible to witness these historical events live as they happened. Ecological issues such as global warming and deforesting pervaded this generation's formative years, as did man-made disasters such as the nuclear meltdown in Chernobyl, the Space Shuttle Challenger disaster and the oil spill caused when the oil tanker *Exxon Valdez* ran aground in Alaska.

Furthermore, Howe and Strauss (1993) argue that Generation Xers faced a number of unique social factors during their formative years that de-

emphasized the importance of children and family in North American society. Specifically, the liberalization of divorce laws, the increase in female participation in the workforce, and the advent of the birth-control pill led to the dissolution of the nuclear family as it had existed in the youth of the Boomers. They further argue that progressive experiments in education and child rearing practices during the formative years of Generation Xers (in reaction to the rigid and authoritative approach of the GIs) left Xers with a poor education and a sense of moral ambiguity. These conditions, Howe and Strauss argue, are indicative of a broader disregard for the interests of youth in the late-1960s and throughout the 1970s. As evidence of this phenomenon they quote a US national commission report from the early 1990s, which stated, "Never before has one generation of American teenagers been less healthy, less cared for, or less prepared for life than their parents were at the same age" (p. 33).

On a more positive note, Barnard, Cosgrave and Welsh (1998) refer to this generation as the 'Nexus' generation, in reference to its intermediary position as a bridge or *nexus* between the Boomers and the techno-savvy Echo generation that followed it. The title of their book, *Chips and Pop* is meant to signify the key influences of this generation's formative years—technology (chips, as in computer chips) and popular culture saturation (pop). Generation Xers were the first generation to experience the power of personal computing during their formative years. Many Generation Xers had their first exposure to computers in school, albeit with crude computers by today's standards. It is a

generation that has become accustomed to continuous innovation and new technologies. It is also the first generation to experience the effects of cable and home satellite television. This generation, it is often argued, suffers the short attention span that is the result of watching hours of high-impact, fast-paced music videos and a lifetime spent flipping through television channels with the remote control.

It is important to note, as with older generations, that the formative influences for the Xers differ between early- and late-Xers. Zemke, Raines and Filipczak (2000) argue that the late-Xers have been graced with relatively good economic opportunities in comparison to their older generation mates. The high technology boom that accompanied the commercialization of the Internet in the late-1990s provided vast opportunities for young Xers, whose savvy with technology positioned them favourably in an abundant job market. These so-called 'gold-collar workers' found themselves to be in high demand as they entered the job market in the dying years of the 20th century. As Zemke et al. note, these highly demanded Xers have not responded to their situation with a sense of gratitude toward the employers that seek to hire them. Instead, they have turned the traditional employment scenario on its head, playing potential employers against each other to see which will offer the most. They have taken the independence of Generation X to its ultimate conclusion; proving to employers that they have to provide an enticing job offer, just so that Xers *might* consider working for them.

In sum, Generation X is a generation that witnessed during its formative years both the miracles of technological advancement and the horrors of man-made disasters. It is a generation that grew up on a steady diet of social and technological change, in a media-saturated world of unabashed consumerism. It is also a generation that has learned to live with looming threats—of nuclear armageddon, of ever-growing deficits and national debt, of persistently high unemployment and inflation, of Quebec separatism and of environmental devastation. Perhaps most importantly, it is a generation that has experienced uncertainty at every turn and has learned to live with it. While it may be argued that unfortunate conditions have befallen all of the generations considered in this chapter, and that this generation has not been faced with the challenges and horrors of war or economic depression, the consistent barrage of formative experiences this generation has faced has been particularly formidable. It is the consensus among writers on the generations that Generation X has inherited a sizeable number of challenges, many of which can be attributed to the actions of preceding generations.

5.4.2 Prominent Values of Gen-Xers

The portrait of Generation X that has been painted by the mass media is grim. It reveals a generation that is disassociated, cynical, apathetic and unmotivated. In comparison to the Matures, who helped to rebuild society after World War II, and the Boomers whose relentless pursuit of success made them the most affluent generation in history, the Xers looked like a sorry bunch of

underachievers. It has often been lamented in the popular press that Generation X is the first generation in history to be worse off economically than their parents were. To the hard-work motivated Mature and Boomers, this could only be attributable to a lack of motivation and ambition on the part of the Generation Xers. The efforts of some Xers to point out the disadvantaged economic state in which they are operating have been greeted by accusations of whininess by older generations. Their elders retort that if they would spend less time whining and more time working for their futures, Generation Xers could be every bit as affluent as their predecessors (Howe and Strauss, 1993; Foot, 1998).

Yet many authors contend that the stereotypes of Generation Xers that are perpetuated by the mass media are far from accurate. On the basis of his values research, Adams (1998) argues that the generation as a whole can be characterized as confident, experience-seeking individuals who are receptive and adaptive to change. Smith and Clurman (1997) have labeled the Xers “the new pragmatists,” to signify their instrumental and rational approach to life. They are argued to be unemotional and calculating, striving to eliminate all spurious information and get straight to the point. Howe and Strauss (1993) argue that Xers are much less inclined to subscribe to ideologies and “isms” than are the Boomers. They note that Xers have experienced diversity change and uncertainty to too great a degree to believe that there are simple answers to life’s problems. Instead, faced with a deluge of possible interpretations and courses of

action, they are rational and calculating with a motive of survival, sorting through the available information for ideas that work.

The most prevalent values ascribed to Xers in various publications are those of fierce independence and autonomy. Seemingly because they were left home alone as 'latch-key' children of two-career families, Xers are envisioned as a group unwilling to rely on others for their success and well-being. Their unwillingness to rely on others (particularly established institutions) has led them to be characterized as self-reliant, as well as suspicious and skeptical of any offers of assistance. As will be discussed below, this is thought to have important implications for their work values.

The assorted literature suggests that Xers are confident about their ability to overcome adversity and to survive in any conditions. Purportedly, this confidence is the result of their demonstrated ability to cope with constant change and to be self-sufficient and resourceful. Despite this apparent confidence, some authors have noted that Xers are not arrogant, but are rather self-deprecating, often to the point of low self-esteem. Howe and Strauss (1993) for example, argue that Xers are quite aware of their shortcomings and may even internalize the stereotypes of their generation that are propagated by older generations. Howe and Strauss note that though Xers generally eschew stereotypes, they are sufficiently cynical as to believe many of the supposed negative attributes of their own generation.

Xers are further portrayed in the literature as impatient and unwilling to defer gratification in the present for future rewards. Presumably, this is because deferral of rewards requires long-term commitment to an activity. In a world that has been changing more rapidly with every year of the Xers lives, it is no wonder that they see anything and everything as dynamic and temporary. In such a context, building for the future means risking the loss of everything you worked for when the uncertain future unfolds differently than you had hoped. Tulgan (1997) notes, "Xers have learned to monitor results aggressively and seek regular feedback to check what is working and what is not and to guide the process of ongoing change" (p. 56).

Xers are also painted in the literature as a socially progressive generation that is egalitarian and comfortable with diversity. Growing up in an age of increased multiculturalism (particularly in Canada) and increasing equality among the sexes, Xers are argued to be highly tolerant of diverse cultural influences. They are also seen to exhibit permissive attitudes towards sex, relationships, and family structure, accepting fluid definitions of family and sexual orientation. Adams (1998) summarizes these characteristics of Xers by stating, "Young Canadians eagerly embrace a number of egalitarian and pluralistic values, including flexible definitions of family, a permissive attitude regarding sex, a desire for egalitarian relationships with others, including their seniors, and the pursuit of happiness over devotion to duty" (p. 103).

5.4.2.1 Burke's (1994a) Study of Generation X Values

In a rare effort at generational analysis, Burke (1994a) empirically examined the values and attitudes of Generation Xers, whom he defined as those individuals aged 19 to 29 (born approximately 1965 to 1975). Drawing on media reports concerning Generation Xers, Burke (1994a) hypothesized that they differ in significant ways from previous generations. Specifically, he posited that Generation Xers are more concerned about work-life balance, the environment, divorce and materialism than are previous generations.

Burke (1994a) tested these generalizations on a sample of 216 university students using a 16-item measure designed to examine "Generation X values." He found these respondents to be most concerned with the organization rewarding loyalty with loyalty, with work-life balance, and with being sufficiently challenged in their work. They were least concerned with variety of tasks in one's work, company perks, work that enhances one's status in the community, and work that is consistent with one's views on the environment. He also found significant differences on four of the 16 values between younger and older members of the sample. Older students were more concerned with being challenged on the job than were younger students. Younger students were more concerned with accommodation of family responsibilities, company perks, and the company rewarding loyalty with loyalty than were older workers.

While Burke's (1994a) study provides some interesting insights regarding the values of Generation X, there are a number of weaknesses that must be

considered. First, the study's sample is too narrow to allow any meaningful generalizations. The 216 respondents were all university students enrolled in business programs. Since the vocational work values literature is premised on the assumption that values are a key determinant of career choices, and hence educational choices, the sample is susceptible to potentially significant bias. Also, the sample of 20 to 29 year olds includes only a portion of Generation X as it has been defined here. This limits the comparability of Burke's findings in the context of the present study. Also, the measure used in Burke's study was designed specifically to capture Generation X values. It therefore provides no insight into the degree to which Generation Xers value those things that are important to other generations. Finally, and perhaps most importantly, the sample did not include members of older or younger generations, providing no means of direct comparison of values responses.

5.4.3 Work-Related Values of Generation X

Perhaps more than any other living generation, the specific values of the Xers reflect strongly on their approach to work, and the role that work plays in their lives. The new values that Xers bring to the workplace have been noted by many authors as a source of major contention between Xer employees and their Boomer and Mature managers.

The assorted literature paints a fairly consistent picture of the Xers as employees. First, almost all authors note that the independence and self-reliance that Xers display in life in general translates directly in the workplace.

Xers are said to value autonomy, seeking independence in solving problems and in deciding how to manage their time and activities. The independence of Xers is also said to be manifested in a strong entrepreneurial spirit. It is argued that Xers are eager to find unique solutions to problems and to try those solutions in practice. This Xer value is epitomized by the maxim 'any job worth doing is worth doing for yourself' (Barnard et al., 1998). Results of a recent study conducted by the research firm d~Code¹⁴ found that Xers selected self-employment and entrepreneurship as their top career choices.

Related to their strong value of independence and autonomy, Xers are said to exhibit very little loyalty to their organizations and managers. Far from W. H. Whyte's archetypal *Organization Man* of the Mature generation, Xers have been decried by many for their 'free agent' approach to employment. It is often argued that, having seen their parents rewarded for years of dedication to the company with layoffs in the downsizing of the 1990s, Xers have little faith that any organization can be trusted to look after their career interests. A recent article in *Fortune* quipped, "New young workers know that loyalty is for suckers; a company can get rid of them at will" (Munk, 1998: 72). For Xers, the notion of a career in one organization, dutifully working one's way up the hierarchical ladder is both foreign and unappealing. Many shudder at the prospect of staying in one organization for an extended period of time. Howe and Strauss (1993) quote one

¹⁴ The report referenced here is entitled *Building Bridges: New Perspective on the Nexus Generation*, conducted in conjunction with Royal Bank and Angus Reid Group (1997).

Xer who says, "I am scared to death of permanence; there is something about the idea of sticking at a job for fifty years that makes my blood clot into tiny icebergs" (p. 227). Lancaster and Stillman (2002) argue that this lack of commitment to any one organization is indicative of the Xers' desire to build a diverse portfolio of skills that will ensure their employability in the absence of job security. The goal of Xers' careers, according to Lancaster and Stillman, is portability and mobility – acquiring skills and experiences from each job that give them the employability and hence the freedom they desire.

Xers are also said to be particularly averse to hierarchy and seniority. It is argued that Xers view structured hierarchical organizations as slow-moving and ineffective. Adams (1998) has argued that the Xers are less deferent to authority than older generations, particularly when their level of education surpasses that of the authority figure. It is said the Xers have little respect for seniority and experience, as they view such things to be weak assets in a rapidly changing world. Zemke, Raines and Filipczak (2000) note that Xers are particularly averse to being told things like "we tried that before and it didn't work" or "this is the way it's always been done around here," as they view such aphorisms as overly dismissive of the Xers' contributions to problem solving. It is said that Xers wish to contribute in a meaningful way to the organization's output immediately; they want to be heard and to participate and not be dismissed for their youth and inexperience. This has earned Xers a reputation for being greedy and impatient, not wanting to "pay their dues" in the organization like their predecessors did.

Munk (1998) quotes a young lawyer who, having just quit a job at a reputable law firm, commented, "You do four years at a top college, three years at law school, and then they tell you that you have to pay your dues for another eight years to become partner and make \$200,000? Thanks a bunch" (p. 63). Lancaster and Stillman argue that for older generations, the notion of 'paying one's dues' has been viewed as part of the employment contract. To Xers, however, it is an unnecessary and annoying waste of the vital years of their careers, years that could be spent contributing in a meaningful way if only they were given the chance.

The literature further suggests that Xers are highly interested in continuously improving their skills. This makes inherent sense because of the independent 'free agent' approach that Xers take to their work. In order to stay in demand and to keep their employment options perpetually open, Xers seek developmental opportunities wherever they can get them. This may be through short-term employment in varied positions, formal education or job-related training that increases their marketability. This is a generation that has faced limited employment opportunities and has therefore learned to improve their employability by undertaking activities that 'look good on a resume' Thus, in accepting a job, Xers may be more interested in how this job will help them find their next job, rather than how the job could lead to advancement within the organization.

It is also emphasized in the literature that Xers, more than any other generation, place a great deal of value on striking a balance between work and other domains of life. It is argued that Xers view with disdain the Boomers who have sacrificed their marriages, families and physical and emotional health in order to advance in their careers. In opposition to the workaholic Boomers, Xers are said to ‘work to live’ rather than ‘live to work.’ Solomon (1998) argues that Xers view work-life balance to be an issue even before they enter the workforce, making strategic career and job decisions with balance as a key criterion.

Maccoby (1988) argued that the Xer desire to balance life and work goes beyond merely ensuring that work does not become all-consuming. He argues that Xers are the first generation in modern history to ask ‘why work at all?’ This marks a serious departure from the Matures who are characterized as strongly adherent to the work ethic tenet of hard work as its own reward. Themselves the product of workaholic career families, Xers know all too well the sacrifices that can be made in the name of career success, and they are determined to avoid them.

Accordingly, it is noted that Xers value jobs with flexible hours that allow them to engage in non-work activities. Furthermore, Barnard, Cosgrave and Welsh (1998) argue that Xers are resistant to the notions of the “time-bravado culture,” in which employees are rewarded for extremely long work hours, and “presenteeism” – having to be at your desk no matter how little you accomplish. Xers, they argue, want to work smarter, not harder. As Lancaster and Stillman

(2002) note, Xers are likely to ask, "Why does it matter when I come and go as long as I get the work done?" (p. 114).

The literature also notes that Xers seek a communal workplace in which they can have fun at work and make friends with coworkers. In other words, they want their workplaces to be social environments, not just places of business. Zemke, Raines and Filipczak (2000) argue that Xers substitute for a lack of family by creating 'surrogate' families made up of friends and co-workers. It is also suggested that Xers are comfortable working and solving problems participatively, as part of a team (c.f. Maccoby, 1988; Conger, 2000), particularly when the team is participative and democratic.

With respect to managerial relations, it is argued that Xers respond more positively to cooperative and egalitarian 'mentoring' relationships with managers, rather than authoritarian 'command and control' scenarios. Because they are suspicious of authority, they are more likely to respond to informal relationships that are casual and not based on hierarchical authority. Furthermore, their desire for autonomy makes them resistant to 'micromanagement' from supervisors.

Finally, with respect to compensation, while the literature suggests that money is important to Xers, Xers are not seen to be interested in the pursuit of money as an end in itself. As Maccoby (1988) notes, money has different meanings to different people and is therefore valued for different reasons. For the Xers, he argues that "Money means freedom from indignity. With enough of it, one can tell any boss to go to hell" (p. 29). Thus, in keeping with the Xers'

strong value of independence, money helps them to be financially dependent, allowing them control over their destinies. This corresponds to Lancaster and

Box 5.3 Fundamentals of Generation X

Formative Influences

- Economic recessions
- Anti-child society
- Stagflation
- AIDS
- Nuclear threat
- Environmental deterioration
- Personal computing
- The wake of the Baby Boom
- Government cutbacks and deficit
- Rap music

Core Values

- Comfort with technology
- Adaptiveness to change
- Pragmatism
- Non-traditionalism
- Acceptance of Diversity
- Confidence and self-reliance
- Immediate gratification

Work Values

- Work is a means to an end - compensation
- Independence and autonomy
- Transactional approach to work – only as loyal as the employer is in return
- Challenge-seeking
- Variety-seeking
- Entrepreneurial
- Distrust of authority and hierarchy
- Immediate contribution rather than 'dues paying'
- Continuous development of skills
- "Free agent" lack of loyalty/Unwillingness to commit
- Work-life balance is essential – 'work to live'
- Fun and communal workplace

Stillman's (2002)

observation that Xers view freedom as the ultimate reward, and work solely as a means to earn compensation.

As summarized in Box 5.3, Xers are portrayed in the literature as highly independent and pragmatic. They are skeptical of authority and hierarchy and prefer flexible working arrangements that allow them to accommodate interests outside of work. They are entrepreneurial and are unwilling to commit

themselves to a single organization, particularly when the organization is unwilling to commit to them. They value a workplace that is fun and communal

and seek friendship among their colleagues. They are impatient, and unwilling to 'pay their dues' before they are able to contribute meaningfully to the organization. They are competent in handling change and new technology and seek the challenges of varied and dynamic work. Finally, they are concerned about money, but only as a means to financial independence and not as an end in itself.

5.4.4 Developmental Stages of Xers

Referring once again to Levinson's (1978) life-cycle model, Generation Xers are currently experiencing the life-cycle phases associated with early adulthood. The youngest Gen Xers have just emerged from the early adulthood transition and face the challenges of defining an appropriate life structure for their adult years. It is in this phase that most young people begin to establish their identity as an adult, and search for and eventually develop a long-term relationship (Levinson, 1978; Feldman, 1987).

Those Gen Xers who have reached age 30 are in the midst of the age-thirty transition, where they reevaluate the life structure they developed in the first phase of early adulthood in terms of their experiences in the interim. It is this process of questioning that will help them refine their life structure for the remainder of their early adulthood era.

The eldest of the Gen Xers are in the last phase of early adulthood. They have reevaluated their life structures and are now in the process of redefining themselves for the remainder of their early adulthood. The key developmental

task of this period is to begin to 'settle down,' making decisions that will affect the remainder of their lives.

With respect to work, the Gen Xers are likely in the early stages of their careers. The tasks associated with this era include overcoming the insecurity of inexperience and gaining self-confidence, learning to work with others, selecting a career and profession, and gaining more independence as an employee (Feldman, 1987). It is expected, therefore that the types of things that Gen Xers will value right now in work will be tied to developmental opportunities and personal growth. While compensation issues may exist, depending on the extent of their job experience and their particular family responsibilities, it is likely that employees at this stage in their careers will seek opportunities to demonstrate their abilities as independent contributors. Lancaster and Stillman (2002) posit that as the Xers become settled down with families and become established in their careers they will value job security and stability more than they have in the past.

5.5 The Baby Boom Echo: Born 1980 and Later

Commentators have recently begun to examine what is perceived to be the next significant generation in the progression of history: the children of the baby-boomers, who are now beginning to show themselves in the workplace. Unfortunately, there has been a great deal of confusion regarding the definition of boundaries for this generation. While the media has been quick to provide names for a post-X generation (such as "Generation Y," "Millennium Busters" and

“Nexters”), there is often little clear indication about to whom they are referring. Some commentators, including some of those cited in this review, have even lumped this generation in with Gen Xers.

Those authors who do draw a distinct line for the post-X generation generally do so in 1980 or 1981, corresponding to the year in which birth rates began to rise in conjunction with the first wave of children being born to the Baby Boomers. The name given to this generation in this thesis—the *Echo* generation—reflects the demographic basis for this generation. Simply stated, the Echo generation is a consequence of the Boomers entering their child-rearing years. Even though the fertility rate had dropped significantly by the 1980s, the Boomers were numerous enough to cause a bulge in the birth rate. And so a generation was born, smaller than the original baby boom, but larger than the ‘baby bust’ that had occurred during the birth years of Generation X. Individuals aged 20 and under presently constitute approximately 28% of the Canadian population and approximately 13% of the labour force¹⁵.

5.5.1 *Formative Context*

The defining element of this generation’s character is its familiarity, at early ages, with technology. A critical element of this generation’s formative period was the emergence of the Internet as a commercial information medium

¹⁵ Labour force statistic is from 2000 and includes people aged 15 and over who were either working or seeking work, either full-time or part-time at the time of Statistics Canada’s *Labour Force Survey*.

throughout the latter half of the 1990s. The rapid diffusion of the Internet as a technological innovation occurred in this generation's youth, allowing them to experience this exciting new medium's explosion at about the same time the front wave of this generation was learning to read.

This generation has been witness to the 'new economy,' growing up during the high technology boom of the late-1990s. The small number of Echo members that have begun to enter the workforce are fortunate to have entered the job market in a time of great economic expansion, where their technological skills and adaptability were both needed and recognized. They witnessed the young 'gold-collar' tail-end Xers just ahead of them command substantial salaries and garner a barrage of job offers. They also saw iconic members of their own generation turn their entrepreneurial spirit and technological skills into million dollar dot-com start-ups. A prominent member of this generation is Shawn Fanning, who, at age 18, upended the music industry by designing a computer program called *Napster* that allowed millions of computer users worldwide to swap recorded music free of charge. Another Echo member, Michael Furdyk, sold the web site that he had developed for \$1 million in 1999, making him a millionaire at the age of 16. Similar Echo success stories abound.

Lewis (2001) argues that the Echo generation is coming of age at the dawn of the information revolution, and that their comfort with technology, their inexperience and their novel perspective give them a strength that older generations do not have. With no ties to the pre-information age, Echo youths

are unfamiliar with the antiquated processes of the past and are adept at finding novel solutions to existing problems. Having never known life without personal computers, this generation also knows implicitly that they are more knowledgeable about technology than are many adults. Lewis (2001) argues that this, along with the democratization of information on the Internet, has propelled the Echo generation beyond the Xers' disregard for authority. In many situations, the Echo view themselves as the authorities. Lewis gives examples of two teens, both 15 years of age, who have used the Internet to gain legitimacy in the adult world. Jonathan Lebed, a New Jersey teen, successfully distributed exaggerated stock information electronically to manipulate the buying behaviour of on-line investors, earning himself \$800,000 in profits from stock trading in a mere six months. Marcus Arnold, a teenager from California, became the top-rated legal advisor on a bulletin-board web site providing free legal advice to users. His advice was utilized and rated more highly than that of the many qualified adult lawyers who posted to the site, despite the fact that he had never opened a law text. Such stories exemplify the new power that Echo youths hold—the mastery of information.

It was noted earlier that Generation Xers grew up in an age when children's interests were considered secondary. The inevitable backlash to this phenomenon has been a more recent return to child rearing as a central life focus. Zemke, Raines and Filipczak (2000) argue that the same Boomers who were apathetic to the interests of younger people are now parents themselves.

They state that “Boomers who postponed having children until their forties . . . [are] determined to do the right thing, going at child rearing with all the intensity and energy with which they’ve tackled everything else in their lives” (p. 128). Thus, unlike the Xers before them, who suffered from a lack of parenting, the Echo find themselves in the position of being ‘over-parented.’ This generation of kids was planned, wanted and pampered, much like the Boomers themselves (Izzo & Withers, 2000). Though it is early yet to predict the impact of this swing in parenting attitudes on the Echo, if history is an indication they may be a new generation of spoiled and selfish rebels. Evidence of this phenomenon appears to be emerging in the media, as social commentators decry the sense of entitlement imbued in this young generation. In a recent newspaper editorial, columnist Naomi Lakritz wrote of the Echo Generation, “Theirs is a sense of entitlement because they’ve been told from their earliest days that they are special. Not for any particular achievement, mind you. The mere fact of existing is quite enough.”¹⁶

A final formative experience of the Echo has been an unfortunate surge in violent and devastating events in the late 1990s and early 2000s. A plague of schoolyard shootings across North America has shown children that they may not be safe even in the places where they are supervised by adult authority figures. The Columbine High School massacre of 1999 showed youths that they

¹⁶ Lakritz, N. (2003). “You’re Too Precious to Fail,” in *Calgary Herald*. Tuesday, April 22.

were not even safe from each other. Acts of terrorism committed on US soil, such as the Oklahoma City bombing, the bombing of the World Trade Centre and most recently the terrorist attacks of September 11, 2001 have further exacerbated this climate of fear. Zemke, Raines and Filipczak (2000) wrote, "We don't yet know what the generation's defining moment(s) will be. It is possible that some earth-shattering event will shape the way they see the world in some profound, yet unforeseen, way" (p. 131). It is possible, if not likely, that the events of September 11 may constitute the "earth shattering event" to which they referred. While the psychological impacts of these events have not yet been fully documented, it is indubitable that they will leave scars on the Echo psyche, if not directly then indirectly through the changes they have made on the world of their formative years.

5.5.2 Predominant Values of the Echo

As this generation is just now entering adulthood, there has been little opportunity thus far to observe their values. The task of decoding this generation's values is made difficult by the fact that the vast majority of its members are still in the midst of their formative years. Thus, it may be years before any unique values of this generation are discernable. There have nonetheless been a number of preliminary attempts made by commentators to extrapolate on the basis of perceived trends from Generation Xers.

The little literature that does exist regarding the Echo generation indicates that the Echo will likely continue the values trends begun by the Boomers and

Xers, carrying them one step further. For instance, their level of comfort with technology and constant change is said to be higher than that of previous generations. Their acceptance of diversity is said to be nearly unequivocal, having only experienced a world that is globally connected and a North American society that is racially diverse. They are said to be a savvy generation with 'street smarts' gleaned from watching hours of 'reality television' on a choice of hundreds of cable or satellite stations. Having been raised without absolutes, this generation will likely be the most post-modern generation in history, eschewing an objective view of reality for one of infinite subjectivity (Zemke et al., 2000). Having a firm grasp of technology, a skill that gives them power over adults, the Echo is argued to be more confident and optimistic about their future than the Xers. With the media fawning over them in a way reminiscent of the Boomers¹⁷, it is little wonder that they see their own value. It has also been argued that the Echo feel a special affinity with the people of their grandparents' generation—the Veterans—and that the Echo shows signs of a push toward a stricter moral code, filling the vacuum that was said to exist for the Xers (Zemke et al., 2000).

Tapscott (1998) has created a profile of the culture of the Echo generation based on his observation of and interaction with its young members on the Internet. He has argued that this generation can be described as fiercely

¹⁷ It is interesting to note that many of the media commentators who extol the virtues of the Echo are Boomers whose *precious* offspring belong to the Echo generation.

independent and highly self-expressive, with strong opinions and a strong desire for freedom of expression. They want very much to be viewed as mature and to be taken seriously, even at young ages, and wish to be treated as intellectual equals with their elders. They are emotionally and intellectually open, often posting their personal thoughts and feelings on online diaries (i.e. web logs). They are highly attuned to diversity and seek experiences that are egalitarian and inclusive of many cultures and social groups. They are highly innovative, constantly seeking to find better ways to do things rather than relying on tried and true methods. They are also highly investigative, seeking constantly to determine how things work rather than simply accepting them at face value. Even more than Generation Xers, the Echo generation demands immediacy, being unwilling to defer gratification or wait for information. Growing up with the Internet, they expect instantaneous access to information and instant feedback. They are savvy consumers who are acutely aware and suspicious of corporate interests. Finally, the anonymity and accessibility of the Internet has forced them to be suspicious of all sources of information unless they are authenticated. Tapscott argues that this generation operates in a virtual world where people and ideas are not always what they seem, and has therefore has learned to view information with suspicion and question the legitimacy of sources.

5.5.3 Work-Related Values

The Echo generation has only recently begun to enter the full-time labour force, as many of its members are still in school. The supposed work values of the Echo are, therefore, largely speculative. Zemke, Raines and Filipczak (2000) argue that the Echo has been optimistic about their prospects as they enter the workforce, having lived through

the relatively prosperous late-1990s. They argue that the Echo is likely to demonstrate a return to the hard work and dedication to goals that the Xers have railed against. Zemke et al. (2000) further posit that the Echo will resemble the Matures in their work values. Specifically, they argue that the Echo will accomplish their goals by working

within the system in an almost Machiavellian manner, accomplishing their goals through acquiescence with authority rather than rebellion against it. They also predict that the Echo will share a belief in collective action, a willingness and dedication to get things done, and a willingness to sacrifice personal pleasure for the common good. Finally they predict that, due to the coddling they have

Box 5.4 Fundamentals of the Echo Generation

Formative Influences

- Information technology
- Child-focused society
- Violence and terrorism
- Gangsta' rap

Core Values

- Comfort with new technology
- Adaptiveness to change
- "Street smart"
- Post-modern, subjective view of reality
- Optimism
- Diversity
- Globally connected
- "Networking"

Work Values

- Working within the system
- Sacrifice personal life for advancement
- Dependent on close supervision
- Dedicated to goal achievement

received from parents and teachers alike (which Xers never had to the same degree), the Echo is somewhat less independent in the work-place, requiring closer supervision than did Xers at the same age.

A different picture is presented by Lancaster and Stillman (2002) who portray the Echo generation as materialistic, demanding and completely devoid of loyalty. They argue that this generation has been 'over-programmed' by their parents, who have insisted that their children engage in a bevy of extra-curricular activities. The integration of electronic media in these young people's lives has caused them to demand instantaneous feedback and to have an incredibly short attention span. This generation, more than any other, has developed, at an early age, the ability to multitask – carrying on several activities simultaneously. It is therefore argued by Lancaster and Stillman that the Echo will seek frequent change and variety in their work and in their lives, and may even switch careers altogether a number of times during their working years.

The work values, general values and formative influences of the Echo generation are summarized in Box 5.4.

5.5.4 Developmental Stages of the Echo Generation

The members of the Echo generation that are working-aged are all presently in the transition period between adolescence and adulthood. The primary task of these years is to develop an identity independent of one's parents

and to strike a balance between the desire for independence and the continued need for support from older adults (Levinson, 1978; Feldman, 1987).

In terms of work, the Echo members are in the exploratory stage of their careers, which involves the discovery of one's interests and disinterests and developing a realistic assessment of one's abilities in the 'real world' (Feldman, 1987). They are in the process of making the school-to-work transition, and if recent trends continue, many of them will go back to school for further education before permanently entering the full-time workforce. The things that people of this age group are likely to value at work include compensation (pay and benefits), challenging and interesting work, opportunities for advancement and variety in the tasks they are completing. Being recent graduates, people in this group are also likely to value the opportunity to use their skills in the workplace, and will probably be eager for feedback and recognition in their work. Rewards that engender tenure or vesting (such as stock options or pensions) are not likely to be valued by this generation because of their youth and because few of them are likely to view themselves remaining with any organization for a long period of time.

5.6 Intra-generational Differences

The caricatures of the various generations presented above may be viewed as simplifications of the rich complexity of values that exist within each generation. Recall Mannheim's (1953) argument that any generation is the result of a confluence of sub-groups. While the goal of this thesis is to examine

differences in values at the aggregate generational level, it is important to acknowledge that the generations are not homogeneous groups. Adams (1998) has provided evidence, based on the analysis of his 3SC Social Values questionnaire, to suggest that each generation is composed of a variety of 'tribes,' each with its own distinct value set, existing within the broader set of values common to the entire generation. The various values tribes described by Adams (1998) are outlined in Appendix G.

Other authors have argued that the values of early, middle and late members of the generation are discernibly different. For instance, Foot (1998) argued that the tail end Boomers were a significantly different cohort from the larger majority of the generation. As has been discussed earlier in this chapter, Howe and Strauss (1993) and Smith and Clurman (1997) argued that the late-Matures have different values than do older members of their generation. Zemke, Raines and Filipczak (2000) argued that the tail-end Boomers exhibit work values that resemble those of Generation Xers. If we acknowledge that generations are merely fairly arbitrary categorical representations of the broader continuum of social change, then it makes intuitive sense that Boomers born in 1961 will have more in common with Xers born in 1982 than with other Boomers born in 1945.

In order to better depict the continual change of values over time, Lancaster and Stillman (2002) have proposed the notion of 'generational cusps' as a means of dissecting generations into more homogeneous categories. They

propose three such cusp groups that straddle the line between generations, sharing values with those slightly older and slightly younger than them. First are what they call Traditionalist/Baby Boomers – the group of people born between 1940 and 1945 who are old enough to relate to the work ethic and traditionalism of the older generation (referred to as Matures in this thesis) and still young enough to share values of rebelliousness with the Boomers. Second, the Baby Boomer/Xers, born between 1960 and 1965, are a group of people too young to have been a part of the larger baby boom culture, but still too old to have been part of the disillusionment of Generation X. Finally, the Generation Xer/Millennials are those people born between 1975 and 1980. They identify with the disillusionment and lack of opportunity of the Xers to some degree, but are also optimistic, having seen the Echo generation's mastery of technology position them as experts at a young age.

The notion of generational cusps may highly useful in the analysis and interpretation of generational research. As Lancaster and Stillman note, these relatively small groups of people trapped between generations provide us with valuable insights about the nature of compatibilities and conflicts between consecutive generations. In the workplace, 'cuspers' can play the vital role of liaison between the generations, helping them to relate to one another.

5.7 Concluding Thoughts: Generational Profiles

This chapter has reviewed popular characterizations of the various generations that currently inhabit the workforce. While the caricatures of the

generations are admittedly exaggerations of stereotypical characteristics that have been overemphasized in the popular press and mass media, it is assumed that there are elements of truth to them that merit investigation. In the absence of any strong theoretical or empirical evidence regarding the values held by members of the generations, these caricatures offer the best available indication of the values differences that may be observed. Furthermore, while it is obviously impossible to use the generalizations outlined in this chapter to predict the values of individuals, it is hoped that general trends in the research findings will support some of these popular conceptions at the aggregate level.

Each of the generations was reviewed above in terms of the key formative experiences that were shared by their members, as well as the general and work values that are purported to have emerged as a reaction to these experiences. Although the lack of sufficient theory and research precludes specific hypotheses for the present research, the intent of this study is to use various measures of work and general values in order to reveal the true nature of the generations and to assess the accuracy of the generalized depictions of the generations described in this chapter.

6 *Age-Related Values Findings*

While empirical investigations of generational value differences are virtually non-existent, a number of researchers have investigated the relationship between values and age. It should be evident by this point that there is a difference between age and generational membership as independent variables. Age is typically incorporated as a continuous variable, or as a categorical variable reflecting the aggregation of respondents into age bands. The common assumption implicit in this approach is that age has importance as a proxy for one's present life-cycle stage at the time at which the research is conducted. Stated differently, age is included as a variable in order to control for variance in responses that are related to the developmental stage of the respondents. However, this approach does not consider the historical and social contexts in which life-cycle patterns are set and thus neglects to consider the influence of generational membership as a salient variable. As discussed in previous chapters, the experience of being a certain age can have very different implications at different points in history.

Age-related findings do, however, have the potential to be useful in the present research, so long as they are placed in the proper context. When reviewing the age-related findings of any study, it is critical to note precisely which generations were included in the sample, and thus, who was "old" versus "young" in relative terms within the sample. Using such an approach,

generational findings could be generated through meta-analysis of age related findings with consideration given to historical context. For the time being, however, it is useful to at least look at age related findings with respect to the generational typology presented in chapter five, in order to extract any relevant insights.

Unfortunately, general values research has largely been devoid of any consideration of age-related findings. The rationale for this omission is theoretical. Since values are considered to be stable over time, there is little theoretical evidence to suggest that age may be a relevant factor in the study of individual values. From a life-cycle perspective, values should not be highly susceptible to change with age. Yet when social and historical contexts are infused with age to create a generational variable, it seems likely that value changes will be detected. Sociological analyses of values (e.g. Williams, 1979) tell us that values do change at the societal level over time, though the precise mechanisms by which they change are poorly understood. Mannheim's (1952) thesis is instructive in this regard, as it tells us that the pace of social and technological change is a key determinant of generational differentiation. If this is true, then we are poised in the current era to witness generational value changes at a more rapid pace than ever before.

Work values researchers have been far more willing to speculate about age-related differences in data obtained with various work values measures. Perhaps the more tangible nature of work values as a psychological variable

makes it more susceptible to change over the life cycle. Or perhaps the fact that the centrality of the work domain changes over the life cycle, with most individuals entering the workforce only after their formative years, makes change in work values seem reasonable. In any event, work values researchers have widely acknowledged the possibility of work values change over the life cycle. Age is included as an independent variable in a number of work values studies, although it is seldom central to the research agenda. Typically, age is included as a control variable, along with such other demographic variables as income, gender and ethnicity. There is not a strong theoretical foundation in the literature for age-related differences in work values, but a number of empirical findings are evident nonetheless. Zytowski (1970), in an extensive review of the work values literature, found no consensus amongst the empirical findings regarding the stability of work values across the life-cycle. Subsequent empirical studies have done little to clarify the situation.

Many of the key work values studies were undertaken in the 1970s, when the members of the Baby Boom generation were the youngest members of the work force. A smaller number have been conducted in more recent years. Some of the key findings of these studies are examined here.

6.1 Taylor and Thompson (1976)

Taylor and Thompson (1976) analyzed differences in work values held by employed persons between the ages of 18 and 65, using the following age cohorts: 17-20, 21-24, 25-29, 30-39, 40-49, and 50-65. These cohorts were

selected in order to “permit a focus upon the differences in values among workers who were under 30 years of age, while also providing a comparison with older workers” (p.524). These categories corresponded to birth years ranging from approximately 1910 to 1958 (depending on when the research was actually conducted). The respondents under the age of 30 in this case were members of the Baby Boom generation, while the older cohort was comprised of Matures and their predecessors, the GIs. There were no members of Generation X old enough to have been included in the study.

Taylor and Thompson (1976) measured work values in terms of five work values factors: *ecosystem distrust*, which represents distrust of “people, things and institutions in one’s environment” (p. 528); *intrinsic rewards*, which relates to intrinsic work attributes (e.g. a supportive boss, enjoyable work); *self-expression*, which measures values pertaining to the opportunity to learn and make independent decisions; *pride in work*, which reflects the respondent’s feelings about the pride that people attach to their work; and *extrinsic rewards*, which relates to extrinsic work attributes (e.g. pay, benefits).

The study found significant differences between older and younger workers with respect to “self-expression,” “extrinsic rewards,” and “intrinsic rewards.” Specifically, younger workers (Boomers) were found to value each of these three values more than did older workers (Matures and GIs), with the importance placed on each of the values diminishing with increasing age cohorts. No significant differences were found between older and younger workers with

regards to the factors “pride in work” and “ecosystem distrust.” On the basis of these results, Taylor and Thompson argued that there was little evidence to suggest the existence of a pervasive generation gap in work values. It is interesting to note that the values differences that were observed appeared to follow a continuous pattern of change associated with increasing age. If generational theory is evoked to explain this finding, it would suggest that the Matures are in fact an intermediate generation between the older GI generation and the Boomers. On the other hand, critics of generational theory may argue that these findings are indicative of a life-cycle effect rather than a generational effect. Unfortunately, without replication of the study at a later date, it is impossible to ascertain which assumption is more correct.

6.2 Buchholz (1978)

Buchholz’s (1978) proposed five belief systems regarding work: the work ethic; the leisure ethic; the organizational belief system (work as a means of achieving success for one’s organization), Marxist related beliefs, and the humanistic belief system (work as a means of self-actualization). Buchholz posited, “young people want more interesting work and more of a chance to develop as a person and are less accepting of traditional beliefs. This suggests that significant differences in beliefs about work may be found between certain age groupings” (p. 221). Accordingly, Buchholz hypothesized that younger workers (under the age of 30) would be less work ethic oriented than people 50 years of age and over “who were born and raised in an era when the work ethic

was supposedly a strong cultural force” (p. 221). He also hypothesized that younger workers would be more humanistic in their approach to work, representing their belief that work should be designed to be meaningful and fulfilling for individuals. Presuming the research was undertaken a year or so prior to the article’s publication, the under-30 group of respondents belonged to the Baby Boom generation, while the over-50 respondents were members of the Mature generation.

Buchholz did not find support for the hypothesis that people under 30 adhere less to the work ethic than did older workers. In fact, the opposite was found to be true; younger workers exhibited higher work ethic adherence than did older respondents. Furthermore, no support was found for the hypothesis that people under 30 would be more humanistic than older workers, as no significant age-related differences were observed. It was further found that workers under 30 were more committed to Marxist oriented beliefs than were workers aged 50 and over. This had not been anticipated a priori.

6.3 Cherrington, Condie and England (1979)

Cherrington (1977) was one of the few authors to expressly acknowledge the role of social and historical, as well as life-cycle impacts on work values. Cherrington proposed three arguments to explain why older workers are more work oriented than younger workers. First, he felt that one’s perspective and frame of reference are changed as he or she reevaluates his or her values throughout the process of growing older. This is similar to Levinson’s

developmental theory, which was published a year earlier. Second, he posited that specific historical experiences, such as the Great Depression or World War II, have a strong impact on one's work values. This argument echoes the formative experiences thesis proposed by Mannheim (1952). Lastly, he argued that the work values of older and younger workers are different because older workers experienced different kinds of training and socialization than did younger workers as they entered the work force.

Building on the theoretical work of Cherrington (1977), Cherrington, Condie and England (1979) sought to determine which of the influences stated above was most salient in explaining work values differences related to age.

They argued,

Empirical comparisons of older and younger workers show that older workers generally have higher incomes, more seniority, higher socioeconomic status, and less education. It is necessary, therefore, to determine whether work values are related to age or to other explanatory variables . . . If age is significantly related to work values, even when the effects of income, education, sex, seniority and occupational level are controlled, then the differences in the work values of older and younger workers might be attributed to the kind of socialization process they have experienced – consistent with social learning and moral development theory. However, if income, sex, education, seniority or occupational level are closely related to work values, then [Cherrington's (1977)] arguments . . . would not be supported" (p. 618).

Cherrington et al. (1979) surveyed 3,053 US workers in 53 manufacturing companies. The questionnaire dealt with attitudes toward job, organization and work in general, as well as incorporating the Blood (1969) PWE scale and Wollack, Goodale, Wijting and Smith's (1971) Survey of Work Values. They

found that older workers (Matures) placed greater emphasis on the moral importance of work and pride in craftsmanship than did younger workers (Baby Boomers). Younger workers placed greater emphasis on the importance of money, the importance of friends over work, and were more accepting of the idea of welfare as an alternative to working. Upward striving was not related to age. They concluded that “the apparent relationship between age and work values is not due to the confounding effects of seniority, education, income, sex and occupational status” (p. 622). Thus, the impacts of socialization and historical context on work values were seen to be contributing factors to age-related differences.

In closing they noted,

It is both practically and scientifically imperative that it be determined whether the relationship of age to traditional work values is due to a maturation process which younger workers will also experience, a historical process which is unique to each generation, a training-learning process subject to control and modification, or some mixture of all three. In light of the empirical results of this paper, work values need to be examined as an aspect of other moral development (p. 622).

Unfortunately, this call for empirical research has gone largely unanswered to date.

6.3.1 Smola and Sutton's (2002) Re-Administration of Cherrington et al. (1979)

In a recent article, Smola and Sutton (2002) administered Cherrington et al's (1979) survey to a sample of 335 MBA students who were employed full time. The aim of the study was to determine whether generational differences

could be detected in work values, whether the work values of American workers had shifted in the 25 years between the studies, and whether work values remained constant over the life-cycle of the older respondents. Their research was cross-sectional, and therefore assessed life-cycle effects by comparing younger workers from Cherrington et al's 1974 sample with older workers (25 years older) in Smola and Sutton's 1999 study.

While their small sample size prevented meaningful analysis between all generational cohorts, they did find some significant differences in the mean work values scores of Baby Boomers (defined as those born between 1946 and 1964) and Generation Xers (born between 1965 and 1977). Specifically, Generation Xers were found to desire rapid promotion more than did the Boomers, and they felt more strongly that 'working hard makes one a better person' than did the Boomers. The Boomers, on the other hand, felt more strongly that "work should be one of the most important parts of a person's life" than did Gen Xers.

In terms of comparisons between young and older workers in the two times, Smola and Sutton (2002) found significant differences in work values, suggesting that workers of the same age, but living 25 years apart in history, have different work values. Specifically, they found that workers of all ages in 1999 attached less importance in pride in one's work and were less convinced that one's individual worth is contingent upon how well he/she does his job than were workers in 1974. The authors concluded that these findings suggest a 'decline' in the work ethic over the 25-year period.

Finally, the authors also found significant differences between the work values of today's older workers and the values of their cohort in 1974, suggesting that the work values of this group of people had shifted over the 25-year period. In the 25 years since the original study, this cohort has become less likely to believe that hard work makes one a better person, or that one's worth is contingent on how well one does their job, or that one should feel a sense of pride in their work. The authors concluded that the historical forces that have shaped the workplace over the last quarter century have precipitated a re-writing of the psychological contract, such that employees have become less loyal and work-centered than they were in their early careers in the 1970s.

Although the generalizability of Smola and Sutton's work is limited due to their small sample, which over-represented military personnel, it provides some insightful findings and presents a useful methodology for comparing generational and age and life-cycle effects over time in the absence of longitudinal data. Their findings lend credence to the present research as they show evidence of generational differences in at least some work values.

6.4 Wayne (1989)

Wayne (1989) developed and administered a measure of both the Protestant work ethic and contemporary values concerning work. The contemporary values included items taken from the literature, reflecting values of importance in the modern world of work (e.g. work-life balance, participative management, self actualization, etc.). He found a significant relationship

between contemporary work values and age, but no relationship between age and the PWE. Specifically, he found that individuals who were in age categories of 25 and younger (Generation X according to the classification used in this thesis) and 31-35 (Baby Boomers) had significantly weaker adherence to contemporary work values than did individuals in the other age categories, including those aged 26 to 30 and 36 and older. Furthermore, individuals in the age category 31-35 had significantly less adherence to contemporary work values than did individuals aged 36 and older. Since these age categories cut across generational boundaries, it is not possible to discern clear generational findings here except that, paradoxically, Boomers adhered less to contemporary work values than did Matures.

6.5 Protestant Work Ethic Findings

In addition to the work values studies discussed above, a number of other researchers in the 1970s reported age-related patterns on adherence to the Protestant work ethic (PWE). The degree of adherence to the PWE among younger people has long been a topic of interest, as there is a pervasive belief among academics and lay people alike that the work ethic is in decline amongst the younger generations (Baguma & Furnham, 1993). Aldag and Brief (1975) found the PWE, measured by the Blood (1969) pro-Protestant ethic scale, to be positively correlated to age, suggesting that older individuals (Matures) were more likely to subscribe to the PWE than were younger (Baby Boom) respondents. As noted above, Buchholz (1978) did not find support for a positive

relationship between PWE and age, but found the opposite—younger people showed stronger adherence to the PWE.

In later studies, Tang and Tzeng (1992) found a small negative correlation between age and adherence to the PWE, suggesting that younger people (in this case, Generation X) held more strongly to the PWE than did older respondents (Baby Boomers and Matures) on the whole. Since no generational categorization was done, it is not clear whether a significant difference exists between the two older generations. Wentworth and Chell (1997) found no significant differences in PWE adherence (using the Mirels and Garrett (1971) scale) between 17-21 year olds and 22-25 year olds (both Generation X), but scores were significantly higher for 17-21 year olds than for 26-29 year olds (Generation X), 30-39 year olds (older Generation X and younger Baby Boomers), and those over 40 (Baby Boomers and Matures). Also, 22-25 year olds (Generation X) had significantly higher scores than those aged 40 and older (Baby Boomers). These findings seem to indicate both inter- and intra-generational differences in PWE adherence

Wentworth and Chell (1997) suggested that their results may be indicative of developmental processes that cause individuals to reevaluate the prudence of the PWE value set as they progress throughout their careers. They also noted the possibility that the higher degree of PWE adherence among the young may have been a reflection of the relatively poor job opportunities available at the time in which the research was undertaken. In such conditions, they argue, young

people may rationalize the hard work and sacrifice they are enduring in the present as important and worthwhile.

While there is no conclusive evidence for generational differences in adherence to the PWE, findings do suggest that adherence tends to decrease with age. It remains to be seen whether this finding will be borne out when generational differences are taken into consideration.

6.6 Summary: Age Related Findings

The existing evidence regarding age-related patterns in work values offers little insight with respect to the generational issue. Findings have been highly inconsistent with respect to Protestant work ethic beliefs, with all generations rating higher than the others in one study or another. Authors have claimed both support for and against a generational gap in work values at different times. The young Boomers were found to value independence, and both intrinsic and extrinsic rewards more than the Matures, and proved to be more Marxist-oriented. Xers were found to desire rapid promotion more than the Boomers, and they felt more strongly that 'working hard makes one a better person' than did the Boomers. Boomers are more likely than Generation Xers to agree that "work should be one of the most important parts of a person's life." The one study reviewed here that compared respondents of the Boomer, Xer and Mature generations used age-categories that cut across generational lines, making it difficult to draw any meaningful conclusions about the relative values of generations.

The lack of consistent age-based values findings, while concerning, does not deal a fatal blow to the present research. Few values and work values studies have incorporated age in their analysis, largely because of variations in the purposes of the research. With the exception of PWE research, values research has not been concerned with correlates of values. Many studies have employed values as independent variables and have therefore been unconcerned with their relationship to age. Those studies that have investigated age-related patterns have not considered the possibility of differences based on generational categories, relying instead on continuous age variables or theoretically insignificant age categories. If the anecdotal evidence supporting generational differences is accurate to any degree, then properly specified generational patterns should appear in the present research.

Part Two: Research Study

Part one of this thesis reviewed the literature pertaining to the concepts of general and work values and the notion of generations as social groupings. Having explored the claims of the popular literature with respect to generational boundaries in the current workforce, and the having reviewed the characterizations of the various generations presented in that literature, we now turn to a description of the research concerning generational value differences undertaken as part of the present study.

Chapter seven outlines the research objectives of this study. Chapter eight outlines the research methodology utilized to address these research questions empirically. Chapter nine details the results of the analysis and Chapter ten provides a discussion of the results, as well as limitations and directions for future research.

7 *Research Objectives*

As noted in chapters five and six, there has been little attempt made in the academic literature to examine generational patterns in general values and work values. An understanding of the nature of such differences would prove an invaluable tool to managers seeking to attract, manage and retain members of the various generations. It is therefore the objective of this research to explore the nature of generational differences in general and work values empirically. To this end, the following research questions are addressed in this thesis:

- 1) What are the general values that are important to members of the following generations: Matures (born in 1945 or earlier); Baby Boomers (born between 1946 and 1961); Generation Xers (born between 1962 and 1979) and the Baby Boom Echo (born in 1980 or later)?
- 2a) What are the work values that are important to members of these generations?
- 2b) To what degree do members of the four generations adhere to the values of the Protestant Work Ethic?
- 3) Are there significant differences between generational cohorts in the importance they ascribe to key general values when the effects of lifecycle and gender are taken into account?
- 4) Are there significant differences between generational cohorts in the importance they ascribe to key work values when the effects of lifecycle and gender are taken into account?
- 4b) Do the different generational cohorts vary significantly in their adherence to the values of the Protestant Work Ethic when the effects of lifecycle and gender are taken into account?

Each of these questions is discussed below.

First, this research seeks to identify the general values that are important to each generation. Identifying the importance of various general values will allow us to gain an understanding of the 'generational identity' of the various generational cohorts. It will also allow us to make comparisons between the empirically derived set of general values and the anecdotal depictions of the generations presented in the popular press as discussed in chapter five.

The second research question concerns the identification of specific work values that are important to each generation. As with general values, the goal is to identify the work values that are important to the members of the four generations, and to compare the empirically derived set of work values to the popular conceptions of these generations outlined in chapter five.

Knowing the general and work values that are important to the various generations is useful as a first step in understanding the nature of generations, but it does not present the entire picture. If generational cohorts are valid social groupings then the values held by the various cohorts should differ significantly. If this is not the case, then the concept of generational values patterns is called into question. It is therefore necessary to determine whether the observed value patterns for the various generations are significantly different from each other. The third and fourth research questions therefore focus on the comparison of

general values and work values held by the four different generational cohorts included in this study. Specifically, this research seeks to determine whether there are statistically significant differences in the importance that the four generations place on the general values, work values and Protestant Work Ethic values included in this research.

In order to establish that any observed differences in general and work values are genuinely attributable to generation and not to other demographic variables, it is necessary to ensure that other, potentially confounding variables are controlled for in the research design. Two variables were deemed to have potential implications for general and work values – lifecycle stage and gender.

Lifecycle was included in the analyses for this thesis in order to help separate values differences that are attributable to lifecycle stage from differences that are genuinely attributable to generational forces as discussed by Mannheim (1952). Although it is impossible to accurately control for lifecycle stage effects without longitudinal data, developmental progress can be measured through the completion of developmental tasks such as marriage and parenthood, as discussed in chapter four.

Gender was included in the research design because past research has provided ambiguous and contradictory evidence regarding the relationship between gender and values. Researchers have generally found that men and women identify different general values as important (e.g. Schwarzweiler, 1960;

Didio et al. 1996; Beutel and Marini, 1995). Unfortunately, no gender-related hypotheses have been tested to date using the Schwartz Value Survey (SVS), the measure of general values to be used in this study. However, Fagensen (1993) found few significant differences between the values of men and women. using the Rokeach Value Survey (Rokeach, 1973), which shares 21 common values items with the SVS.

Findings have been much more contradictory with respect to the relationship between gender and work values. Some studies have found gender-related differences in work values (e.g. Manhardt, 1972; Wayne, 1989; Elizur, 1994; Burke, 1994b; Abu-Saad & Israelowitz, 1997,), while others have found none (e.g. Mirels & Garrett, 1971; Tang & Tzeng, 1992; Rowe & Snizek, 1995; Harding & Hikspoor, 1995). Given the level of uncertainty in the extant literature regarding the relationship between gender and general and work values, it was deemed wise to include gender in the analyses of this thesis in order to control for values differences that might exist between men and women.

The inclusion of these two variables allowed us to determine whether generational differences are evident in general values, work values and PWE values, once the effects of gender and lifecycle are taken into account.

8

Methodology

This chapter outlines the methodology used to address the research questions specified in chapter seven. First, operational definitions of the various concepts are presented in order to facilitate this discussion of methods. Next, the nature of the sample used for this study is examined. The challenges of values measurement are then discussed, followed by a description of the measures of general and work values used in this study. The process through which these measures were developed is then explained, followed by a discussion of the development and testing of the research questionnaire. Finally, the procedure followed in the collection and analysis of research data is discussed with reference to each of the four research questions of this study.

8.1 Operational Definitions of Concepts

Prior to discussing the procedures used to test the research questions outlined in chapter seven it is necessary to discuss the way in which each of the key constructs used in the analyses were operationalized. This section begins with operational definitions of the demographic variables of interest (generation, lifecycle and gender). This is followed by a discussion of the measurement of general and work values.

Generation

The investigation of generational values necessitates an *a priori* classification of generational cohorts. Generation, for the purpose of this study, was defined on the basis of existing generational classifications in the generational literature, as discussed in detail in chapter five. Respondents were classified into four generational categories on the basis of their ages, which were used to calculate their years of birth. The four generational categories are as follows:

- Matures - Those born in 1945 or earlier (aged 58 when research was conducted)
- Baby Boomers - Those born between 1946 and 1961 (aged 42 to 57)
- Generation Xers – Those born between 1962 and 1979 (aged 24 to 41)
- The Echo Generation – Those born in 1980 and later (aged 23 and under).

Lifecycle stage

It was noted in chapter four that the study of generational differences in general and work values needs to be separated from differences related to life-cycle stage. In the present study, information on two key developmental tasks (marriage and parenthood) was collected and combined to create a measure life-cycle stage. Marriage and parenthood were chosen as lifecycle factors because they represent challenges to the individual that must be overcome in the developmental process. As such, these events may serve as opportunities for reflection and refinement of the value system (Levinson, 1978). While many

other developmental milestones could have been used in the construction of a lifecycle variable, marriage and parenthood were selected because they are fairly universal developmental tasks in our society. While it is recognized that the measurement of and control for the impacts of this set of developmental tasks provides a limited proxy for the full process of adult development, their inclusion represents an attempt to assess the role of developmental stage differences in values within the scope of a cross-sectional study.

Respondents were asked to identify their 'present marital status as either 1) never married, 2) married or living with a partner, 3) separated or divorced, or 4) widowed. In order to simplify the already complex sample design, divorced, separated and widowed individuals were excluded from the sample, as it was reasoned that marital breakdown or the loss of a spouse may be significantly related to values, therefore confounding life-cycle analysis. Unfortunately, information was not collected on whether or not respondents had been previously divorced or separated, which made it impossible to control for this influence.

Parenthood was measured by asking respondents to identify the number of children they had, if any. Those people with one or more children were classified as parents and those without children were classified as non-parents. No distinction was made between dependent and non-dependent children or biological and adopted or stepchildren.

The marital status and parenthood variables were then combined to create a lifecycle variable. Life-cycle stage was operationalized using the following three categories:

- 1) single non-parents (never married);
- 2) married non-parents; and
- 3) married or single parents.

It was reasoned that each subsequent lifecycle stage represents added responsibilities and new roles for an individual to manage. Married and single parents were merged into a single category because the number of parents who had never been married was quite small in the overall sample.

Gender

As discussed in chapter seven, the potential for confounding gender-based differences in general and work values was controlled through the inclusion of gender in the analysis. Respondents were asked to identify themselves as either male or female.

8.2 Subjects

The sampling frame for this thesis consisted of single and married Canadian knowledge workers from each of the four generations being studied. The decision to limit the sample to knowledge workers was made because past research has shown that the type of work one does is correlated with one's work values (c.f. Pennings, 1970). Focusing on knowledge workers also provides the

benefit of limiting the sample to respondents in a fairly narrow range of incomes and educational levels, providing some degree of control for the effects of these variables. Thus only workers employed in managerial, professional, technical and administrative positions were included in the sample.¹⁸

As noted in the previous section, divorced, separated and widowed individuals were omitted from the sampling frame in order to avoid potential values confounds arising from marital breakdown or loss of a spouse. Only those individuals fitting into one of the three lifecycle categories (never married with no children, married with no children and single or married with children) were included in the sampling frame.

When the sampling frame is divided into four generations, three lifecycle categories and two genders as described in the previous section, a 24-cell matrix is created as shown in Table 8.1. Each cell in this table represents a group of respondents with a unique combination of these three variables. It was expected a priori that eight of these groups represented outliers in the population and would therefore be largely absent from the sample for this study. These eight outlier groups are indicated by shaded boxes in Table 8.1. Specifically, men and women from the Echo generation who were married or had children were expected to be few, as members of this generation were aged 23 and younger at

¹⁸ This operational definition of knowledge workers coincides with that used by Duxbury and Higgins (2001), the principal researchers in the original study employing this sample. Only administrative positions having supervisory functions are included.

Table 8.1 Sampling Frame

Life Cycle Stage	Echo		Generation X		Baby Boomers		Matures		
	Gender	M	F	M	F	M	F	M	F
Single – No Children		X	X	X	X	X			
Married – No Children				X	X	X	X		
Married or Single Have Children				X	X	X	X	X	X

the time of this study. Furthermore, it was expected that few Matures would be found who had never married or had children, given the relative ubiquity of these practices in our society. It was therefore expected that only two of the generations – Generation Xers and Boomers – would have members in all three of the lifecycle stages. The sampling frame was therefore restricted to the groups marked with an X in Table 8.1.

In order to adequately address the research questions for this study, sufficient numbers of respondents from each group in the sampling frame were needed. The complexity of the sampling frame made it difficult to locate respondents from a single source. The sample for this study was therefore drawn from three different sources. Each is described below.

Sample 1: Duxbury and Higgins' 2001 Study of Work-life Balance

First, a sample was drawn from the respondents of an existing data set, collected by Duxbury and Higgins (2001) in a national survey of public, private and not-for-profit employees concerning work-life balance issues. The original sample consisted of 31,571 respondents from 100 organizations in the private, public and not-for-profit sectors. All of the organizations were large, with 500 or

more employees. The 100 organizations included 40 from the private sector, 22 from the public sector and 38 from the not-for-profit sector. The private sector companies spanned a number of industries, including: telecommunications, high technology, retail, transportation, pharmaceutical, financial services, entertainment, natural resources and manufacturing. The public sector sample included 7 municipal governments, 7 provincial government departments, and 8 federal government departments/agencies. The not-for-profit sector organizations consisted of 15 hospitals/district health councils, 10 school boards, 8 universities and colleges, and 5 “other” organizations that could best be classified as not-for-profit or para-public service (e.g. social service, charity, protective services).

As part of the survey for the Duxbury and Higgins study, respondents were asked to voluntarily indicate their interest in participating in follow-up research. A list of over 10,000 interested individuals was generated through this process. The researchers responsible for the collection of these data consented to the use of the follow-up respondent list for the purposes of the present research. The use of existing research subjects provided the opportunity to generate a stratified sample for the present study, which was necessary in order to generate large enough groups for comparison in the generational analysis¹⁹.

¹⁹ Since the various generations are not equally represented in the population as a whole or the labour force, it is necessary to stratify the sample in order to obtain sufficiently balanced cohorts to allow for meaningful comparisons. Random sampling would not provide such balance without a very large sample.

Potential respondents from the subsample obtained from the Duxbury and Higgins (2001) dataset were contacted by telephone between November 2002 and May 2003 and asked if they were willing to participate in the study. Of the 2,767 potential respondents fitting the criteria for this study, 2,045 (74%) were selected to be contacted based on their demographics. Of the 2,045 who were contacted, 678 (33%) were reachable by telephone within five attempts. Of the 678 people who were contacted, 648 (96%) agreed to take part in the study. Of these 648 people, a total of 584 (90%) returned completed questionnaires. In total, 562 (96.2%) of the questionnaires that were received from this subsample were usable. The high participation rate amongst those who were successfully contacted is likely attributable to the respondents' having indicated their prior willingness to take part in follow-up research.

Sample Two: Federal Public Servants

The Duxbury and Higgins (2001) sample provided insufficient numbers of respondents from Echo and Generation X cohorts to do meaningful analyses involving both gender and lifecycle. Therefore, it was necessary to supplement this sample with respondents from other sources. Additional Generation X respondents were obtained through a convenience sample of young employees of the Canadian Federal Public Service. These respondents belong to a network of regional associations of young public servants. The national council governing these associations agreed to take part in this study by soliciting participation from

its 4,067 members via electronic mail messages sent by the various regional associations. A total of 993 respondents completed and submitted questionnaires. This represents 24% of the people who received the email inviting them to participate. This response rate is reasonable given that respondents were contacted via a general email message rather than by personal contact.

In accordance with the practices of the Federal Public Service, the survey was translated into French by federal government translators. Preliminary investigation of the values data showed significant differences between French and English respondents. The highly subjective nature of values measurement makes it very susceptible to bias due to differing interpretations of the wording of values items. It is therefore impossible to determine the degree to which observed value differences were the result of actual value differences versus error introduced by the translation process. In order to control for potential bias, the 182 French responses were not included in the final sample. Also, 282 respondents did not fit the description of "knowledge workers" mentioned above and were dropped from the sample. After these deletions were made, 529 (53% of the total sample) questionnaires remained eligible for use in the present research. Of these, 506 (96%) were complete and usable.

Sample Three: Undergraduate Business Students

Since the sample for this study was restricted to people working in knowledge work positions, which normally necessitates some level of post-secondary education, the number of Echo generation respondents available in both the Duxbury and Higgins (2001) and the Federal Public Service samples were not large enough to permit the kinds of data analysis required to address the research questions of this thesis. Consequently, a third sub-sample consisting of undergraduate university students taking courses in business administration was sought. It was reasoned that university students, particularly those in business programs, are the most likely source of tomorrow's knowledge workers, and as such, are a close proxy for Echo-aged knowledge workers. The student subsample was comprised of students who were enrolled in third-year undergraduate business classes between May 2002 and July 2003. A total of 217 students were given the opportunity to complete the survey in exchange for a small grade bonus. Of these 217 students, 187 (86%) completed and submitted surveys. Since the intention of the student sample was to capture Echo generation respondents, 47 students who belonged to older generational cohorts were dropped from the sample. This prevented a potential confound in other generational groups between student and non-student respondents. Of the remaining 140 questionnaires, 123 (88%) were complete and usable.

8.3 Measures

This section outlines the measures of general and work values used in the questionnaire employed in this study. The challenges inherent in the measurement of values are discussed first. This is followed by a brief discussion of the relative merits of the two main techniques used to measure values: rating and ranking. Next, the development and testing of the measures used in this thesis to collect data on general and work values are discussed. This section concludes with a discussion of the development and pre-testing of the research questionnaire.

8.3.1 Challenges in the Measurement of Values

The complex and abstract nature of the values construct poses three specific challenges when designing values measures. The first of these challenges is that of designing a measure that encourages the respondent to reflect deeply enough on his or her values to be able to respond accurately. As seen in chapter two, values are seen to operate, for the most part, below an individual's level of consciousness (Locke, 1976; Rokeach, 1973; Meglino & Ravlin, 1998). In other words, the influence of values on attitudes and behaviour may go relatively unnoticed until an individual pauses to reflect on them. It is therefore important that values measures be constructed in such a way as to allow the respondent to consciously explicate his or her values hierarchy in a systematic manner.

The second challenge in values measurement is that of capturing the complex theoretical nature of values. Recall from chapter two that the concept of values is theorized to be multi-dimensional. Locke (1976) proposed three dimensions that comprise the values system: *values content* (the values that are held by the individual); *values intensity* (the intensity with which each value is held); and *relative value importance* (the importance of each value relative to the others). This conceptualization is consistent with elements of Kluckhohn's (1951) theory as well as the renowned model of the values system proposed by Rokeach (1973). In keeping with this theoretical dimensionality of values, the accurate measurement of the values concept requires not only the identification of *values content* and the *intensity* with which each of those independent values is held, but also to identify the *relative importance* of each value in affecting attitudes and behaviour.

A final challenge in measuring values is that of minimizing the burden placed upon respondents. The measurement of values requires that respondents reflect deeply on their values and the way in which they are related to one another, which may prove to be a mentally arduous task. Values measures must therefore be designed in such a way as to minimize the cognitive task for the respondent—to allow them to respond without having to rank large numbers of values stimuli or make a large number of comparisons between highly similar items. It is also imperative to ensure that the response task is not so mundane as to discourage participation in the study. Since values

measurement relies on self-reporting instruments, it is reasonable to expect that the mental challenge and tedium of the response task will be negatively related to the response rate, and hence, the sample size (Cooper and Schindler, 1995).

8.3.2 Approaches to Values Measurement – Rating versus Ranking

The two most common approaches to quantitative values measurement are rating and ranking. Rating methods require respondents to score a predetermined set of values items on a Likert-type scale on the basis of their importance. Ranking, on the other hand, requires the respondent to order some predetermined list of values items in terms of their relative importance. With respect to the three specific measurement challenges outlined in the previous section, both rating and ranking methodologies offer benefits and drawbacks.

In terms of response burden, ranking methodology is relatively simple conceptually, and requires little effort on the part of the respondent when the set of items to be ranked is relatively small. However, the larger the set of items to be ranked, the greater is the cognitive task for the respondent. Consider, for example, the mental effort required to rank order a set of 30 stimuli. Research indicates that the task of ranking items (in pairs or as a total set) becomes more difficult for a respondent when the items are highly similar, and when the respondent is fairly ambivalent in his or her feelings about the relative importance of the items (Meglino and Ravlin, 1998). This is a serious impediment to the use

of ranking for the measurement of values, which are by their nature abstract, ambiguous and of varied importance to individual respondents.

Rating, on the other hand, allows the respondent to assess each value item in isolation, lessening the cognitive burden on them, particularly when the set of items is large. However, it may be difficult for respondents to identify the specific intensity that they attach to the value, particularly when the scale involves fine gradations. Consider for instance, a seven-point Likert scale with points labeled “somewhat important” and “important.” Given such choices, it may be difficult for respondents to accurately estimate the degree of importance on the scale, given the rather abstract and ambiguous nature of the values concept. However, the widespread use of Likert-type scales in the social sciences stands as evidence of their utility and acceptance as a valid measurement approach (Cooper and Schindler, 1995).

With respect to the challenge of affording respondents the opportunity to reflect on their values, ranking measures offer some advantage. Meglino & Ravlin (1998) argued that ipsative measures such as ranking, which force the respondent to make choices between items, best reflect the way that values actually operate, by mitigating the possibility of social desirability effects. Recall from chapter two that values are theorized as part of a hierarchical system of values. By forcing the respondent to make choices regarding which values are more important than others, the inherent conflict between values within each

individual is approximated, and the respondent is prevented from rating all values as independently high.

The final challenge in designing values measures is that of capturing the nature of the values construct as it has been theorized. Recall that a good measure of values should capture the *content* and *intensity* of individual values as well as the *importance* of individual values relative to one another. Most values measures, including both ranking and rating methods, are not concerned with values content, as researchers generally obtain this information through either exploratory research or literature review. As such, the content of values is generally predetermined, and not left for respondents to identify.

Value intensity is generally measured in rating measures by asking the respondent to identify the importance of a given value independent of the others. This independent assessment of importance indicates the degree to which the value is held by an individual. Value intensity is not measured by ranking methods, which are purely assessments of relative importance. This is somewhat problematic, as rankings do not give evidence of the degree to which individuals hold an individual value, just its location, relative to the others, within the hierarchical values structure. In other words, by providing no evidence of value intensity, ranking measures give us the relative position of various values in the hierarchy, but with no measure of magnitude in order to assess the relative distances between the values hierarchically. Essentially, ranking generates ordinal data rather than interval data.

In measuring the relative importance of values items, ranking methods provide the clear advantage. Rating measures allow respondents to consider the importance of individual values items independent of other items. As such, there is no comparison of relative importance required, as each item is considered separately. Ranking, on the other hand, requires that the respondent consider the values items as a group, ordering them hierarchically to represent their theoretical values hierarchy. While it may appear that a researcher could easily deduce a respondent's hierarchical ranking of values by looking at the individual ratings that he or she ascribed to the various values items (that is, identifying highly rated values as high priority), it must be remembered that intensity and relative importance are different dimensions of values that require different measurement techniques. Meglino and Ravlin (1998) argue that ratings of values that are made independent of one another cannot be transformed into hierarchical rankings, as such a transformation concocts an assessment of relative importance that was not consciously made by the respondent. They note "the transformational methodology would seem to be problematic because a mathematical transformation is not capable of capturing information that was not contained in the responses before they were transformed" (p. 363). Thus, the only means of capturing the relative importance of values items is through an ipsative measure.

With the advantages and disadvantages of these techniques so evenly divided, the decision as to which is more appropriate must be in consideration of

the research question being posed. If it is important for the researcher to understand the values hierarchies of individuals, perhaps for the purposes of using values as an explanatory variable in studying decision-making or some other psychological process, then ranking measures would be useful. If, as in the present research, the interest is in comparison of values scores across individuals or groups of individuals, then rating measures are more appropriate. Thus for the purpose of this study, it was decided that rating measures of values would prove more useful. However, as will be discussed below, the measure of work values that was designed for this study represents an attempt to capture some of the advantages of ranking techniques as well.

8.3.3 Measurement of General Values

As evidenced in chapter two, conceptions of values vary widely between theorists and researchers. Consequently, the measures devised to capture these concepts empirically vary widely as well. Since values content (i.e. the specific values that are included for study) varies significantly between values measurement instruments, the selection of an instrument must be defended on theoretical as well as empirical grounds. In the present study, general values were measured using the Schwartz Value Survey (SVS) (Schwartz, 1992, 1994, 1997; Schwartz & Sagiv, 1995).

The SVS was chosen for a number of reasons. First, the values included in the measure were obtained partly from the previous work of Rokeach (21 of

the items are taken directly from Rokeach, 1973), as well as from a review of other values instruments and literature on the topic. As noted previously, Rokeach's work represents the seminal contribution to the study of human values, being widely cited and employed by researchers. Thus, as an extension of Rokeach's work, the SVS is rooted in the theoretical tradition of values research. Second, the Schwartz model has been tested extensively on 155 samples from 55 different countries (Ros et al., 1999). This testing has served to prove the robustness of the model, as well as accumulating a large pool of comparative results. The multinational testing and refinement of the SVS has allowed researchers to identify a set of values that have proven to be universal in all of the societies that have been studied. It therefore represents arguably the best existing measure of universal 'human' values content. Finally, the SVS is supported by a strong theoretical framework that provides not only a comprehensive factor structure for values, but also the interrelation of these factors in an integrative model. The theoretical framework for the SVS has been tested empirically in a number of studies (Schwartz and Bilsky, 1987; Schwartz, 1992; Schwartz and Sagiv, 1995; Feather, 1995; Schwartz, 1997; Schwartz, 1999) and has been replicated in each study.

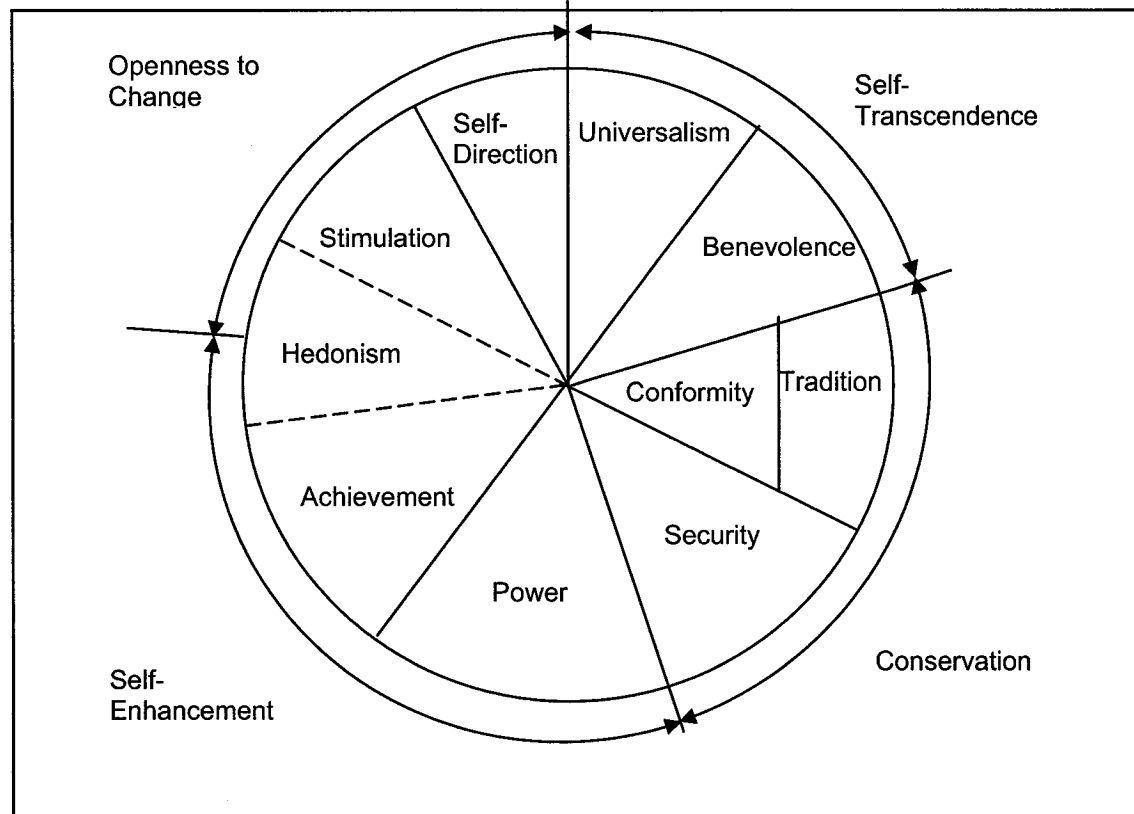
The original form of the SVS (see Appendix H) had respondents rate the importance of a set of 56 values items 'as a guiding principle' in their lives. The scores on the measure's nine-point scale range from -1 to 7 with the following labels:-1 'Opposed to my values,' 0 'Not Important,' 1 unlabeled, 2 unlabeled, 3

'Important,' 4 unlabeled, 5 unlabeled, 6 'Very Important' and 7 'Of Supreme Importance.' The inclusion of the negative scale point allows respondents to indicate opposition to a given value. For instance, if an individual is opposed to the value 'obedience,' he or she can indicate his or her opposition by rating this value negatively. This negative scoring allows for the measurement of an individual's value content, by asking the individual to indicate whether he or she holds each of the included values (by assigning each a rating zero or higher on the scale) or does not hold it (by assigning it a rating of -1). As such, the survey does not presume a priori, as do other values measures, that every respondent holds every included value to some degree.

It is important for the sake of values measurement to remember the theoretical distinction, discussed in the previous section, between value intensity and relative importance. The SVS asks respondents to indicate the degree to which a given value is important to them as a 'guiding principle' in their lives. This can be considered analogous to asking respondents to identify the intensity with which they hold the value, as holding a value implies that it has some degree of importance to the individual. Put another way, asking a person if "freedom" is important to him or her is merely another way of asking if he or she values freedom. This is somewhat confusing, as it may appear that the use of an *importance* scale is designed to measure *relative importance* of values. However, since respondents are not required to consider other values when rating an individual value, the scale gives no real indication of the relative

position of said value in the individual's value hierarchy. One should not assume that a high independent importance scale score (e.g. a score of 7) represents evidence of high position in the values hierarchy, as the individual is not asked to consider the other values in generating that scale score (Meglino and Ravlin, 1998). It is conceivable that an individual may rate two independent values highly—possibly on the basis of different criteria—even though he or she may place different degrees of importance on them when they are considered relative to each other. While this discussion may appear to be a matter of mere semantics, it is important to note that the SVS does not contain any measure of relative importance of values items. Despite the lack of a relative importance measure, it was decided that the SVS should be used in this study without modification for the sake of comparability with the numerous other studies that have employed this measure.

Figure 8.1: The Schwartz Model of Human Values



As discussed in Chapter 2, the set of values included in the SVS represent ten value types that have been repeatedly demonstrated to exhibit a pattern of compatibilities and conflicts (see Figure 8.1). For instance, the values associated with power are compatible with those associated with achievement. Similar relationships exist for values associated with achievement and hedonism, hedonism and stimulation, stimulation and self-direction, self-direction and universalism, universalism and benevolence, tradition and conformity, conformity and security, and security and power. Conversely, the values associated with self-direction and stimulation conflict with those of tradition, conformity and

security. Similar conflicts exist between universalism and benevolence versus achievement and power, and hedonism versus conformity and tradition.

Of the 56 values items incorporated in the original version of the SVS, 44 were found by Schwartz and Sagiv (1995) to fit reliably into their hypothesized factor categories in subsequent cross-national replications of the survey. Accordingly, on the advice of Schwartz and Sagiv (1995), subsequent research using the SVS has employed the reduced, 44-item measure (e.g. Schwartz, Verkasalo, Antonovsky & Sagiv, 1997; Steenkamp et al., 1999). For the sake of parsimony, the reduced 44-item instrument was used in this study.

Because the set of 44 values items was too large to be practical for the purposes of the analyses used in this study, the ten higher-order general value types shown in Figure 8.1 and Table 8.2 were used. To calculate these higher-order value scores, the raw value scores for the various items contained in each higher-order value were summed and divided by the number of items, as per the instructions given by Schwartz (1992, 1994). Negative scores indicating opposition to a value item were included in the calculation of means, again as suggested by Schwartz (1992, 1994).

The consistency with which the 10-factor structure of the SVS has been replicated in a large number of samples from dozens of countries (c.f. Schwartz, 1992; Schwartz and Sagiv, 1995; Steenkamp et al., 1999) lends credence to its use as a means of deriving dependent variables. Nonetheless, prior to using these ten value-type variables as dependent variables, the factor structure was

examined through confirmatory factor analysis using LISREL software. Maximum likelihood estimation was used to estimate the model. The independence model that tests the hypothesis that all variables are uncorrelated was strongly rejected (X^2 (df=946) = 60033.62, $p < .001$). The hypothesized factor structure was supported, with a comparative fit index (CFI) = .93. A chi-square difference test showed a significant improvement in fit between the independence and hypothesized models. The path diagram for the confirmatory factor analysis is given in Appendix I. All path coefficients were significant at the $p < .01$ level.

8.3.4 Measuring Work Values:

As discussed in chapter 3, there exists a litany of different measures of work values, each having a slightly different focus and incorporating different numbers and varieties of values. There is, however, a significant degree of overlap between these measures. Given the exploratory nature of the present

Table 8.2: Definitions of Value Types (Schwartz, 1992)

Value Type	Definition	Single values that represent it
Power	Social status and prestige, control or dominance over people and resources	Social power, authority, wealth
Achievement	Personal success through demonstrating competence according to social standards	Successful, capable, ambitious, influential
Hedonism	Pleasure and sensuous gratification for oneself	Pleasure, enjoying life
Stimulation	Excitement, novelty and challenge in life	Daring, a varied life, an exciting life
Self-Direction	Independent thought and action – choosing, creating exploring	Curious, creativity, freedom, choosing own goals, independent
Universalism	Understanding, appreciation, tolerance, and protection for the welfare of <i>all</i> people and for nature	Protecting the environment, broad-minded, a world of beauty, social justice, wisdom, equality, a world at peace
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact	Helpful, honest, forgiving, loyal, responsible
Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide	Accepting my portion in life, devout, humble, respect for tradition, moderate
Conformity	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms	Obedient, honouring of parents and elders, politeness, self-discipline
Security	Safety, harmony, and stability of society, of relationships and of self	Clean, national security, reciprocation of favours, social order, family security.

research and the rather broad characterizations of the work values of the generations that were elicited from the prevailing literature, the goal in selecting measures to be used in this study was to incorporate as wide a variety of work values items as possible, while capturing the three dimensions of work values (content, intensity and relative importance). The lack of such a measure in the extant literature required the development of a comprehensive, yet parsimonious measure of work values for use in the present study. The following sections outline the development of the work values measure used in this study, with

specific reference to the following dimensions: content; intensity; and relative importance.

Work Values Content

The first goal in designing a work values measure was to generate a list of work values items that would represent the *content* of the work values measure. The measure's items were developed through a five-stage process that involved 1) review of existing measures to generate an exhaustive list of work values items; 2) qualitative identification of any 'new' items that may be pertinent in the modern context that were not included in the extant measures; 3) culling the exhaustive list to eliminate redundancy; 4) sorting the work values items into meaningful categories to reduce the number of concepts; 5) checking the emergent categories by independent raters to produce a final set of items; and 6) providing appropriate wording to capture the meaning of each of the final items. Each step in this process is explained more fully below.

In order to identify pertinent work values for inclusion in this measure, extant work values measures were first reviewed. Twelve relevant measures were selected (see Appendix J). These measures were identified as important contributions to the study of work value measurement because they were discussed in reviews of the work values literature (c.f. Zytowski, 1973; Dawis, 1991; Dose, 1997) and used in work values research. The values measures selected represent a variety of approaches to the study of work values (the various approaches were detailed in chapter three).

The items contained in these 12 measures were then reviewed and a complete list of uniquely worded values items was compiled. This process was complicated by the fact that the various measures of work values used different structures and formats. For instance, some measures (e.g. Elizur, 1994) merely listed values as single words and asked respondents to rate or rank them based on their importance. Others (e.g. the Minnesota Importance Questionnaire (MIQ) and the Work Values Inventory (WVI)) provided one or more brief statements meant to capture the essence of each value and asked respondents to rate their agreement with those statements. Still other measures (e.g. Jurgensen, 1978) listed values and provided a brief definition of the value in order to provide clarification for the respondent. In constructing this list of values, every attempt was made to clearly identify the essence of the work values with concise value labels. Values worded identically in two or more measures were included only once on the list. The initial review resulted in a list of 132 uniquely worded work values items.

In addition to the review of existing measures, a small exploratory investigation was performed in order to identify any work values not included in the set of measures. A group of 51 undergraduate business students taking a second-year undergraduate human resources management course were asked to list ten things that they considered to be important in their *ideal job*. This phrasing of the question mimics that used in the Minnesota Importance Questionnaire (Dawis & Lofquist, 1984). The students' responses were matched

with the categories that emerged from the review process discussed above to determine whether any work values items were suggested that were not mentioned in the existing measures. The students' responses generated a list of 68 unique items, all but two of which conformed with existing work values items derived from the measures reviewed. Specifically, a significant number of the students (62%) indicated that some degree of travel was an important element of their ideal job. Also, 16% indicated the importance of pay based on competence rather than on seniority. This latter finding conforms to Harding and Hikspoor's (1995) argument that the call for greater responsibility from employees over the last two decades has been matched by increasing expectations for flexible and equitable compensation systems. Since neither of these items was included in any of the 12 measures reviewed, they were added to the list of values. This resulted in a list of 134 unique work values items.

Once this initial list of 134 work values items was generated, the number of items was reduced by amalgamating items with only superficial wording differences. For example, the values "authority" and "a lot of authority" were condensed into a single item. When any doubt existed about the similarity of items, the two items were left separate. This initial culling produced a reduced list of 118 unique work values items. These items were then categorized by the author of this thesis into values categories on the basis of their similarity. The factor structures that had been identified in previous studies employing the various work values measures were used as a starting point for categorization.

The goal of categorization was to identify unique, homogeneous values categories incorporating all 118 of the uniquely worded values items.

As a check on the categories that emerged from this process, the list of 118 items was presented for sorting to two independent judges with knowledge of the subject matter. Each sorter was given cards with the values written on them and was asked to sort them according to a given list of categories. In instances of discrepancy, the sorters and the author of this thesis discussed the source of the disagreement in order to eliminate misinterpretations. In all cases, the discrepancies were resolved through mutual agreement. On the basis of these discussions some items were reallocated and some of the values categories were renamed to more clearly describe the nature of the values they comprised.

The sorting process resulted in a set of 31 work values which incorporated the full set of 118 original work values items. A small number of items pertaining to aesthetics (beauty in work), physical work activity and 'working with one's hands' could not be categorized to the satisfaction of the reviewers, and were therefore removed from the analysis. Since these items seem to be relevant to a narrow range of professions not related to knowledge work, it was felt that their exclusion from the set of values would not be overly detrimental.

Once the 31 distinct values were identified, the task remained of drafting scale items to represent each work value. As a starting point, the 12 values measures that were used to compile the item list were consulted to determine

how other researchers had worded similar work values items. Scale items were then drafted for each of the 31 work value items, using the wording from the 12 original measures as a guide where possible. Every attempt was made to ensure that the essence of each work value was captured in the new draft scale items. The 31 work values items that emerged from this process are given in Appendix K.

Work Value Intensity and Relative Importance

As detailed in previous sections, the goal in creating a values measure is to capture the nature of the values construct (including content, intensity and relative importance), while simultaneously minimizing the burden on respondents. Given the number of values items generated through the process mentioned above, ranking was ruled out as a suitable technique for assessing work values, as the task of rank-ordering a set of 31 items would be onerous for respondents. The challenge thus remained of designing a rating instrument that would capture all three dimensions of the values concept. Although it was decided that the Schwartz Value Survey would be used in this study without modification in order to maintain its comparability with existing research findings, the creation of a new work values measure provided the opportunity to combine the dimensions of values content, intensity and relative importance in a single measure.

As discussed previously, rating instruments (including the Schwartz Value Survey) generally lack a measure of the relative importance of value items. While such rating measures typically identify the intensity with which the respondent holds individual values, they do not provide evidence regarding the relationships between those values. This makes the measure highly susceptible to social desirability bias, by allowing respondents to rank numerous values as highly important, without having to identify their relative importance (Meglino and Ravlin, 1998). The hierarchical nature of values proposed in the values literature suggests that some values are weighted more heavily than others in making decisions and selecting courses of action. The intent in designing a rating scale is therefore to ascertain both the intensity of each work values item and the relative weight that the respondent gives each value item in making decisions and selecting appropriate behaviours.

In order to capture both intensity and relative importance, respondents were asked to rate each of the 31 work values on two separate scales; one designed to capture the intensity with which they held each work value and one designed to indicate the importance of each work value item relative to the other work values. Both of these rating measures are described in turn below.

Scale 1 – Intensity

The intensity scale asked respondents to rate the degree to which each of the work values items was important to them as it pertains to their work. The

phrasing of the instructions is consistent with that used for the Work Values Inventory (Super, 1970). Respondents were asked to rate the items on a scale identical to the 9-point scale employed in the Schwartz Values Survey, as outlined above (-1 'Opposed to my values,' 0 'Not Important,' 1 unlabeled, 2 unlabeled, 3 'Important,' 4 unlabeled, 5 unlabeled, 6 'Very Important' and 7 'Of Supreme Importance.'). This was done for the sake of consistency and to allow for direct comparisons of results across the two measures.

Scale 2 – Relative Importance

In keeping with the notion of a values hierarchy, respondents should have the ability to identify those work values that have a strong influence on their attitudes and behaviours as well as those that exert less of an influence. It was reasoned that, by asking a respondent to rate the degree to which a work value is likely to be considered in making decisions and selecting behaviour, it should be possible to approximate the values hierarchy by differentiating high priority values from low-priority values. The issue remained however, of how to phrase the question so as to capture this information.

Kluckhohn (1951) argued that the values within the hierarchy can be classified according to their level of *priority* for the individual. To him, priority was a means of classifying values based on their importance relative to the other values. Using Kluckhohn's (1951) model as a guide, respondents were asked to consider the list of 31 work values items and indicate "how likely each item is to

be a top priority for you in deciding to accept a job or remain in a job". In order to maintain consistency, the numerical scale for this measure was the same as that for the work value importance questions described above (i.e. -1 'opposed to my values,' 0 'not likely,' 1 unlabeled, 2 unlabeled, 3 'likely,' 4 unlabeled, 5 unlabeled, 6 'very likely,' 7 'a definite priority').

Combination of the Work Values Scales

The intensity and relative importance scales for the work values items were combined in order to create an overall measure of work values. To be certain that the two work values scales were not redundant, bivariate correlations were run on the variables. As seen in Appendix L, the correlations between the intensity and relative importance measures for each work value item were moderately high, with correlation coefficients ranging from 0.53 (fun, accomplishment) to 0.81 (travel). All correlations were highly significant. Correlations close to unity would have suggested that the measures were redundant and one of them could have been dropped without losing significant information about respondents' values. With the exception of one item (travel) the correlation coefficients between intensity and priority measures were 0.80 or lower. For more than half of the items, correlation coefficients were 0.70 or lower. This suggested that the measures, though moderately high in

correlation²⁰, were not redundant and both contributed unique information to the overall analysis of work values.

To combine the dimensions of content, intensity and relative importance into a single measure, all items that were not opposed to the respondent's values (i.e. those that received a score ranging from 0 to 7) were given a weighted importance score that averaged their intensity and relative importance scores for that item. Theoretically, this approach should provide a fuller overall picture of the degree to which each item is valued by a respondent.

To illustrate, consider an individual who rates the item "salary" as very important (score=6), but then indicates that it is not very likely to be a priority in selecting or remaining in a job (e.g. score=2). The same respondent also rates the item "creativity" as very important to him/her (score=6), and indicates that it is very likely to be a high priority in selecting a job (score=6). When the importance and priority scores are averaged to produce overall value scores, we see that the value "creativity" would receive an overall score of 6, while the value "salary" would receive an overall value of 4. While this technique does not provide the same degree of information as does ranking methodology, it does acknowledge the importance of relative importance as a dimension of values, and adds variability to the responses.

²⁰ Williams (1968) identified the following rule of thumb for interpreting the magnitude of correlation coefficients: 0.40 - 0.70: moderate correlation; substantial relationship; 0.70 - 0.90: high correlation; marked relationship; 0.90 - 1.00: very high correlation; very dependable relationship.

Factor Analysis of the Work Values Scales

Vocational work values measures such as the Super's (1970) Work Values Inventory and the Minnesota Importance Questionnaire have been factor analyzed to identify underlying higher-order values. A similar approach was followed in this thesis and a principal components factor analysis of the weighted work values scores was used to reduce the data to a more intuitive and workable set of variables. Those respondents indicating that a given work value item was opposed to his or her values were not included in this factor analysis, but were identified for a separate analysis outlined below.

A varimax rotation was used, as there was no a priori assumption that the resultant factors would be correlated. Missing values were replaced by variable means. The following criteria, suggested by Kim and Mueller (1978), were used to determine the factors: factor loadings must be 0.5 or higher; and eigenvalues for each factor must be equal to or greater than 1.0. As shown in Table 8.3, these criteria produced a six-factor solution with all but six of the 31 items loading on one of the factors. The following work value items did not meet the criteria for inclusion and were therefore excluded from further analysis: 'advancement,' 'autonomy,' 'competence,' 'feedback,' 'physical setting,' and 'supervisor.'

The first factor, labeled 'intrinsic work values,' explained 33 percent of the variance and had a reliability coefficient of 0.91. This factor contained nine items

Table 8.3 Factor Analysis of Work Values Items

	Intrinsic	Extrinsic	Status	Altruism	Freedom	Social
Intellectually Stimulating	0.860	0.055	0.073	0.073	0.073	-0.018
Challenge	0.825	0.151	0.153	0.119	-0.022	0.006
Interesting	0.800	0.051	0.048	0.050	0.134	0.212
Continuously Learn	0.724	0.175	0.108	0.077	-0.035	0.266
Fulfilling	0.663	0.047	0.019	0.460	0.108	0.173
Accomplishment	0.656	0.072	0.139	0.381	0.038	0.041
Use the Abilities	0.646	0.138	0.108	0.200	0.071	0.028
Variety	0.641	-0.019	0.224	0.080	0.240	0.229
Creativity	0.623	-0.120	0.230	0.201	0.121	0.099
Benefits	0.049	0.758	0.047	0.035	0.310	0.041
Salary	0.124	0.732	0.277	-0.157	0.211	0.038
Job Security	-0.064	0.728	0.077	0.145	0.235	0.096
Authority	0.110	0.117	0.771	0.045	0.013	-0.021
Prestigious	0.062	0.173	0.723	0.046	0.055	0.221
Influence	0.424	0.023	0.614	0.191	0.140	-0.007
Travel	0.201	-0.101	0.529	-0.188	0.095	0.411
Recognition	0.235	0.388	0.516	0.255	0.037	0.269
Moral Values	0.287	-0.014	0.004	0.693	0.198	0.051
Contribution	0.434	-0.141	0.120	0.612	0.061	0.079
Fairness	0.251	0.415	0.032	0.572	0.153	0.161
Hours of Work	0.090	0.298	-0.048	0.019	0.749	0.226
Balance	0.081	0.358	-0.150	0.138	0.677	0.176
Work Alone	0.035	0.095	0.326	0.129	0.577	-0.047
Fun	0.253	0.087	0.208	0.062	0.129	0.793
Co-Workers	0.079	0.194	0.085	0.247	0.136	0.783
Advancement	0.363	0.444	0.477	-0.135	-0.127	0.156
Autonomy	0.427	0.068	0.381	0.145	0.470	-0.116
Competence	0.453	0.327	0.318	0.196	0.010	0.047
Feedback	0.268	0.429	0.309	0.436	-0.034	0.291
Physical Setting	0.229	0.286	0.078	0.219	0.461	0.321
Supervisor	0.204	0.419	0.061	0.436	0.196	0.361
Eigenvalue	10.157	3.188	2.181	1.420	1.200	1.148
% of Variance (Rotated)	32.765	10.285	7.034	4.581	3.872	3.702
Cumulative	32.765	43.049	50.084	54.665	58.537	62.239
Reliability Coefficient (α)	0.912	0.807	0.768	0.693	0.643	0.807

Rotation = Varimax. Missing values were replaced by means.

pertaining to intrinsic elements of work – those aspects that are psychologically appealing, such as intellectually stimulating work, work that is challenging, interesting and varied. They might be likened to the ‘motivators’ in Herzberg’s (1959) motivator hygiene theory of motivation.

The second factor, referred to as 'extrinsic work values,' explained 10% of the variance and had a reliability coefficient of 0.81. This factor contained three items related to extrinsic elements of work such as salary, benefits, and job security. These correspond to Herzberg's (1959) hygiene factors.

The third factor, labeled 'status-related work values,' contained five items related to status within the organization. These included authority, prestigious work, influence in the workplace, and recognition. This factor explained seven percent of variance and had a reliability coefficient of 0.77.

The fourth factor, 'altruistic work values,' explained five percent of the variance and had a reliability coefficient of 0.69. The three items comprising this factor pertain to altruism at work (making a contribution to society, doing work that is consistent with one's moral values, fairness).

The fifth factor, 'freedom-related work values,' consisted of three items pertaining to personal freedom and independence in the workplace, such as convenient hours of work, autonomy, having the ability to balance work and life and working alone. This factor explained four percent of total variance and had a reliability coefficient of 0.64.

The sixth and final factor, labeled 'social working environment,' related to the social context of the workplace, and contained items related to social relations with co-workers and a fun work environment. This factor explained four percent of variance and had a reliability coefficient of 0.81.

Overall, the six-factor solution explained 62% of the variance, which suggests a strong solution given the number of items (Kim & Mueller, 1978). Reliability coefficients (Cronbach's alpha) for the factors ranged from 0.64 to 0.91. All but two of the factors had high reliability coefficients of 0.75 or higher. The remaining factors had acceptable, but moderate reliability coefficients. The strength of the factor solution and the acceptability of the reliability coefficients lend support to the use of these six factors as dependent variables in the analyses for this study.

It should also be noted that this factor structure resembles that of the Minnesota Importance Questionnaire, a 21-item measure of work values that contains many items in common with the set of 31 items used here. Specifically, extrinsic work values are similar to the MIQ's *comfort* values, intrinsic work values resemble the MIQ's *achievement* values, altruistic work values are similar to the MIQ's *altruism* values, freedom values are like the MIQ's *autonomy* values, and status values are seen in both factor sets. The MIQ's *safety* values have no analogue in the factor structure obtained in this study, and the social values obtained here do not have a comparable factor in the MIQ. It should also be noted that the extrinsic and intrinsic factors are similar to those found in a factor analysis of Super's (1970) Work Values Index (Super 1973).

8.3.5 *Measurement of Protestant Work Ethic Values*

As discussed in chapter 3, the PWE has generated significant research attention from researchers in a wide variety of disciplines. Perhaps the most rigorous investigation of work ethic measures was that of Furnham (1990), who administered seven popular measures of the work ethic to a sample of 1,021 respondents. Based on the results of his analysis, he developed a 51-item instrument to measure the work ethic. Furnham (1990) reports that the measure captures all of the work ethic factors theorized in the literature. Blau and Ryan (1997) administered Furnham's (1990) measure to a sample of 543 respondents and reported acceptable reliability (all alpha coefficients >0.70) and validity for the scale. On the basis of their findings, Blau and Ryan (1997) suggested a more parsimonious twelve-item version of the instrument. The brevity of the Blau and Ryan (1997) refinement of the Furnham (1990) instrument, and its link to other established measures make it appealing in the context of the present research.

The twelve-item work ethic instrument (shown in Table 8.4) requires respondents to indicate their level of agreement on a seven-point Likert-type scale where 6='strongly agree', 5='agree,' 4='slightly agree,' 3='neutral,' 2='slightly disagree,' and 1='disagree' and 0='strongly disagree.' Using exploratory factor analysis, Blau and Ryan (1997) found that this 12-item measure captured four dimensions of the PWE: hard work; dislike of leisure;

Table 8.4: Blau and Ryan's (1997) Work Ethic Measure

PWE Dimension	Corresponding Items
Items related to the virtue of Hard Work	<ul style="list-style-type: none"> • If you work hard you will succeed • If one works hard enough, he or she is likely to make a good life for him/herself • Hard work makes one a better person
Items related to an Anti-leisure ethic	<ul style="list-style-type: none"> • People should have more time to spend in relaxation • More leisure time is good for people • Life would be more meaningful if we had more leisure time
Items related to the virtue of Independence	<ul style="list-style-type: none"> • Only those who depend on themselves get ahead in life • One should live one's life independent of others as much as possible • To be superior a person must stand alone
Items related to the virtue of Asceticism	<ul style="list-style-type: none"> • You can't take it with you, so you might as well enjoy yourself • If you've got it, why not spend it • "Eat drink and be happy, because who knows what tomorrow may bring?" may be stated strongly, but nevertheless it reflects the proper orientation toward life.

asceticism; and independence. These dimensions correspond closely with the findings of Furnham (1990), as reported in chapter three.

In order to use these four dimensions as variables in the analyses for this thesis, it was necessary to first assess the reliability of the scales. The methodology used to construct the four PWE subscales was as described by Blau and Ryan (1997). As a first step, the negatively worded items for leisure and asceticism were recoded so that all scales reflected higher adherence to the PWE. As a second step, the 12 PWE items were used to construct the four PWE dimensions as shown in Table 8.4. Indexed scores were calculated as the summed average of the items in each dimension. These four dimensions were then subjected to confirmatory factor analysis using LISREL. Maximum likelihood estimation was used to estimate the model. The independence model that tests the hypothesis that all variables are uncorrelated was strongly rejected (X^2 (df=66) = 2967.26, $p < .001$). The hypothesized four-factor structure was

supported with a comparative fit index (CFI) = .92. A chi-square difference test showed a significant improvement in fit between the independence and hypothesized models. The path diagram for the confirmatory factor analysis is given in Appendix M. All coefficients were significant at the $p < .01$ level. This analysis supports the inclusion in this study of the four dimensions of the PWE: hard work; asceticism; anti-leisure; and independence.

8.3.6 Pre-testing of the Measures

Once the various measures had been developed they were incorporated into a draft questionnaire for pre-testing. Since the work values measures included in this study involved items and scoring methods that had not been employed before in empirical research, it was felt that a pre-test was essential to avoid any unforeseen difficulties with the wording of instructions and items included in the various measures.

For the sake of expediency, the questionnaire was pre-tested on a group of 56 undergraduate students in a second-year undergraduate human resources management class who were asked to voluntarily complete the questionnaire in exchange for a participation incentive in their course. Since fourteen of the student pre-test participants were employed on a full-time basis, it was felt that this sample would also help determine the appropriateness of the questionnaire for employed individuals.

After completing the questionnaire, participants were asked to comment in writing on the ease with which they were able to complete the questionnaire and to highlight any issues they had in understanding or completing any part of the questionnaire. They were also asked to indicate the amount of time it took to complete the questionnaire. On the basis of the feedback received during the pre-test, minor wording changes were made in order to clarify some of the work values items. No major changes to the instructions or scales were indicated. The average time taken to complete the questionnaire was 32 minutes.

8.4 Procedures

This section details the procedures followed in the collection and analysis of data for this study. First, the data collection process is discussed, followed by discussions of the analytic techniques utilized to address each of the research questions of this thesis.

8.4.1 Data Collection

For the convenience of the respondents, the finalized survey questionnaire (shown in Appendix N) was made available in three formats: a paper copy sent by mail with return postage included; a web-based survey requiring an identification number that was e-mailed to the respondent; and an electronic version sent to respondents by email to be printed, completed by hand and returned by mail or fax. Respondents who did not return questionnaires

Table 8.5 Breakdown of Method of Response by Generation

Generation	Method of Response			Total
	Mail	Web	Email or Fax	
Echo	0%	99.3%	.7%	100.0%
Gen X	10.7%	82.8%	6.5%	100.0%
Boomer	32.3%	52.7%	15.0%	100.0%
Mature	50.9%	43.9%	5.3%	100.0%
Total	16.7%	75.4%	7.9%	100.0%

within 90 days were sent written reminders and attempts were made to contact them by telephone or email.

In total, 35% of the completed surveys were received by return mail, 44% via the Internet survey and 21% were printed from email and returned by mail or fax. There were no significant differences between the response rates for the mail, web and email versions of the survey. However, as seen in Table 8.5, the method of response varied significantly between generations. As might be expected, the use of the web-based method of response was highest for the youngest generation and diminished with older generations. The use of mail as a method of response was lowest with the youngest generation and increased for the older generations. The fact that the four generations used different methods to respond to the survey is very interesting and supports the notion of generational differences.

8.4.2 Analytic Procedure

The procedures used to analyze the data are discussed in the following subsections for each of the four research questions of this thesis. This is

followed by a discussion of the data screening procedures used prior to the analyses.

Identification of the General Values of Various Generations

As noted in chapter seven, the first research objective of this study was to determine which general values are most important to members of the various generations. The following analysis was undertaken to address this question. First, mean scores were calculated for each of the ten value types measured by the Schwartz Value Survey (SVS) (see section 8.2.2) for each of the four generations (Echo, Generation X, Baby Boomers and Matures). These aggregate mean scores reflect the average intensity with which the members of each generation hold each of the general value types.

As previously discussed, the SVS does not incorporate a measure of relative importance. It is therefore impossible to accurately determine the order in which members of the various generations would rank the value types as a set. However, it is plausible to assume, given the values theory discussed in chapter two, that high intensity values are likely to be high in importance relative to low intensity values. Thus, although intensity scores do not provide sufficient information to recreate a rank-ordering of the general values types for each generation, they do provide a rough indication of which value types are higher in importance and which are low in importance.

The inclusion of a negative scale point in the SVS measure (-1 'opposed to my values') allowed us to determine whether or not a value was held by an individual. As a second step in the analysis of general values the percentage of respondents in each of the four generations who opposed a given value item (i.e. gave the value a negative score) was calculated. The 44 general value items were used in this analysis rather than the ten general value types in order to identify the precise items to which respondents were opposed. Examination of these data allowed us to gain additional insight into the different generations' value sets.

Generational Differences in General Values

Inspection of the mean value scores for each generation provides a general idea of whether or not differences in general values exist. Such analysis does not, however, take into account extraneous factors that may confound the effect of generation on general values scores. This issue is addressed by the second research question in this thesis, which seeks to determine whether there are significant differences in the general values of various generations when the effects of gender and life cycle are taken into account. In terms of quantitative analysis, the question is whether the mean differences in value scores (the dependent variables) between generational groups (an independent variable) are larger than would be expected by chance, holding constant the impacts of gender

and life cycle (independent variables). This type of comparison requires the use of analysis of variance techniques.

Analysis of variance (ANOVA) techniques allow for the detection of statistically significant differences between two or more groups on one or more dependent variables. In the case of this study, the groups being compared were the four generational cohorts and the dependent variables were scores on the ten SVS value types. Because multiple dependent variables were being considered, it was necessary to determine whether it was appropriate to use ten independent ANOVAs or whether the ten dependent variables should be considered as a group in a multivariate analysis of variance (MANOVA).

MANOVA allows for the comparison of test groups (i.e. generations in this case) on a number of dependent variables simultaneously by creating a linear combination of the dependent variables. It tests whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance (Tabachnick & Fidell, 2001). When the dependent variables are highly correlated as a set, MANOVA provides the advantage of detecting differences between groups on the set of dependent variables as a whole, which may not be detected through independent ANOVAs (Tabachnick & Fidell, 2001). The determinant of whether MANOVA or independent ANOVAs are more appropriate is Bartlett's test of sphericity, which tests the null hypothesis that the dependent variables are uncorrelated (Cooper & Schindler, 1995). In the case of the ten value type variables, the test statistic was significant at the $p < .001$ level,

indicating that the variables were correlated. This analysis indicates that MANOVA is the more appropriate method of analysis in this thesis, rather than independent univariate ANOVAs for each of the 10 value types. MANOVA was therefore used to address the second research question of this thesis – whether the generational cohorts (which were determined *a priori*) differed significantly with respect to their values, when gender and lifecycle were held constant.

As discussed in section 8.2, the sampling frame for this thesis included neither Echo generation respondents who were married or had children nor Matures who were single or childless. Because these two generations did not contain members from all three lifecycle stages, it was impossible to include either generation in analyses incorporating lifecycle stage. To resolve this issue, two separate MANOVAs were run. The first, which included all respondents, was a 2 X 4 between-subjects MANOVA with the 10 SVS value types as dependent variables and gender (male, female), and generation (Echo, Generation X, Boomer and Mature) as independent grouping variables. This allowed us to determine the main effect of generation and gender on general values as well as any interaction effects that are observable between gender and generation.

The second analysis, which included only Generation X and Boomer respondents, was a 2 X 3 X 2 between-subjects MANOVA with the 10 SVS value types as dependent variables and gender (male, female), life cycle (single no children, married no children, single or married with children), and generation (Generation X and Boomer) as independent grouping variables. This analysis

allowed for the detection of main effects for the grouping variables generation, gender and lifecycle, as well as potential two- and three-way interactions between these variables.

In addition to the multivariate and univariate MANOVA tests, strength of association measures (eta squared) were examined for all independent variables in order to determine which variable – generation, lifecycle or gender – explained the largest percentage of variance in the 10 general value types.

To determine if there were any significant differences in the content of each generation's general values, each of the values items that received a significant number of negative scores (indicating opposition to respondents' values) was analyzed through logistic regression to determine if significant generational differences were evident. This technique was used to ascertain whether the probability of a respondent rating a values item as opposed to his or her values was significantly related to his or her generation. To control for the impact of gender and lifecycle, these variables were included in the logistic regression analyses, as were the two-way interactions between generation and gender, generation and lifecycle, and the three-way interaction between gender, generation and lifecycle.

Identification of the Work Values of Various Generations

The third research objective of this thesis was to determine which work values were most important to members of the various generations. As

discussed in section 8.4.2.4, work values were also assessed through a separate examination of adherence to the Protestant work ethic. The measure of work values used in this research was designed to capture the content, intensity and relative importance of work values items. In order to analyze work values content, the percentage of respondents in each of the four generations who opposed a given work value item (i.e. gave the work value a negative score) was calculated. The 31 work value items were used in this analysis rather than the six work values factors in order to identify the precise items to which respondents were opposed. Examination of these data allowed us to gain additional insight into the different generations' work value sets.

To determine which work values were important to the various generations, mean work values scores were calculated for each generation based on respondents' scores on each of the six work factors. The rating scores used to calculate these group means were the averages of respondents' scores on the importance and priority scales for each of the various work values items (henceforth referred to as combined work values scores). Means for the six work values factors were calculated as the summed average of the items included in each factor. Negative value scores (i.e. where a respondent rated a value with a score of -1) were not used in the calculation of combined work value scores, but were analyzed separately.

Adherence to Protestant Work Ethic by Various Generations

In order to assess the degree to which individuals adhere to the four dimensions of the Protestant Work Ethic, mean scores on all four of the PWE scales were calculated for the members of each generation. Means were calculated as the summed average of each respondent's scores on the three items comprising each of the four sub-scales.

Generational Differences in Work Values

The fourth research question asked whether there were any significant differences in the work values of the various generations. To investigate differences in the intensity and importance of work values across generations, the six work values factors (see section 8.2) were subjected to analyses of variance. As with general values, Bartlett's test of sphericity indicated that MANOVA was preferable to independent ANOVAs, as the null hypothesis of uncorrelated dependent variables was rejected at the $p < .001$ level of significance. As with general values, it was necessary to divide the analyses into two separate MANOVAs. The first, involving all respondents, was a 2 X 4 between-subjects MANOVA with the six work values factors as dependent variables and gender (male, female) and generation (Echo, Generation X, Boomer and Mature) as independent variables. The second analysis, which included only Generation Xers and Boomers, was a 2 X 3 X 2 between-subjects MANOVA with the six work values factors as dependent variables and gender

(male, female), lifecycle (single no children, married no children, single or married with children), and generation (Generation X, Baby Boom) as independent variables.

Differences in work values content were assessed by identifying work values that were opposed by respondents (i.e. those values that received a score of -1) from each of the four generations. In order to identify the precise item to which respondents were opposed, the 31 work value items were used rather than the work value factors. For each work value item that received a significant number of negative scores, a logistic regression was performed with a binary variable (i.e. 1=opposed to the value, 0=not opposed to the value) as the dependent variable and generation, gender and lifecycle stage as the independent variables. The two-way interactions between generation and gender and generation and lifecycle, and the three-way interaction between gender, generation and lifecycle were also included in the logistic regression models.

Measures of strength of association (eta squared) were generated for each independent variable to assess the respective percentages of the observed variance in work values that was explained by the various independent variables.

Generational Differences in Protestant Work Ethic Values

To assess whether there were generational difference in respondents' adherence to the values of the Protestant Work Ethic, the four PWE variables

were assessed through MANOVA. The methodology used in this analysis was identical to that described for general values and work values. The dependent variables in the analysis were the four PWE factors suggested by Furnham (1994) and Blau and Ryan (1997). Again, Bartlett's test of sphericity was used to determine whether MANOVA or independent ANOVAs was the more appropriate method of analysis. The null hypothesis of no interaction between the dependent variables was rejected at the $p < .001$ level, suggesting that MANOVA was the appropriate technique for the analysis.

Again, the limitations of the sampling frame meant that the impact of lifecycle stage could only be assessed for two of the generations. This required two different sets of analyses. To examine the impact of generation while controlling for gender, a 2 X 4 between-subjects MANOVA was conducted with the four PWE factors as dependent variables and, gender (male, female) and generation (Echo, Generation X, Boomer and Mature) as independent variables. To examine generational differences between Boomers and Generation Xers while controlling for gender and lifecycle, a 2 X 3 X 2 between-subjects MANOVA was conducted with the PWE factors as dependent variables and gender (male, female), life cycle (single no children, married no children, single or married with children) and generation (Generation X and Boomer) as independent variables.

Measures of strength of association (eta squared) were generated for each independent variable to assess the percentage of variance in PWE scores explained by each independent variable.

8.4.3 Data Screening

As discussed in the previous sections, differences in general and work values were assessed through the use of multivariate analysis of variance (MANOVA). This technique requires that three assumptions be satisfied: observations must be independent of one another; the dependent variables must follow a multivariate normal distribution; and the covariance matrices for the dependent variables must be equal for each group (Stevens, 1992). Prior to conducting the MANOVAS, the data were screened to ensure that these assumptions were sufficiently met.

First, the data were inspected for out-of-range values and outliers that might affect the results. Other than correctable data entry errors, no aberrations were found. The demographic variables (marital status, dependent children and age) were then examined for multivariate outliers using Mahalanobis distances with $p < .001$ within each generational cohort, as suggested by Tabachnick and Fidell (2001). None of the subjects exceeded the critical value of the Mahalanobis distance, so no deletions were required.

Finally, the distributions of all dependent variables included in the analyses were examined for normality. The histograms and normality plots for the 10 SVS value types revealed fairly normal distributions with a tendency toward negative skew for all but one of the variables. The same pattern was found for the six work value factors, except for status-related values, which

showed no skew. Three of the four PWE values were normally distributed with a slight negative skew. The leisure value, on the other hand, was normally distributed with a slight positive skew. Since MANOVA assumes normality of the sampling distribution of means, and there is no theoretical reason to believe that the population distributions of these variables would be non-normally distributed, the slight divergence from normality of these variables was not judged to be problematic for the analyses.

Multivariate analysis of variance also requires that the variance-covariance matrices within each cell of the design are homogeneous, implying that they are sampled from the same population variance-covariance matrix and can be pooled. The test of this assumption, Box's M, uses the F statistic to test the null hypothesis of homogeneity of the variance-covariance matrices for the 10 SVS values, the six work values factors and the 4 PWE values. The null hypothesis could not be rejected at the $p < .01$ level. This signified homogeneity across groups and supported the use of MANOVA as the method of analysis in this study.

Finally, prior to performing analysis on the dataset, it was necessary to investigate whether any significant differences existed between sub-samples on each of the sets of dependent variables. Specifically, it was necessary to determine if there were any systematic differences between the student subsample, the Duxbury and Higgins subsample and the public sector subsample. Such analyses were complicated by the fact that almost all Echo

respondents belonged to the student sample. Differences associated with the Echo generation could therefore have been attributable to their generation, to the fact that they were students, or to both of these factors. Because of this confound, no meaningful analyses could be performed to determine if there was a systematic bias associated with the student subsample that would affect the analyses.

Tests were, however, conducted to determine whether significant differences could be found between the public service subsample and the Duxbury and Higgins subsample that could have confounded the analyses for this thesis. Separate MANOVAs were conducted using the general values items, Protestant Work Ethic items and work values factors as the dependent variables. Each analysis contained an independent variable that identified whether the respondent was part of the federal public service or not and controlled for generation, gender and lifecycle. Results of these MANOVAs showed no significant difference between federal public servants and other respondents on any of the sets of variables being studied ($p < .05$). There were also no significant interaction effects between the subsample variable and any combination of the gender, lifecycle or generation variables. It was therefore concluded that the public service sample could be merged into the larger sample without adversely affecting the overall analysis.

9 *Results*

This chapter presents the results of the statistical analyses that were conducted to address the four research questions outlined in chapter seven. The characteristics of the sample are presented, followed by the results of analyses related to each of the research questions of this thesis.

9.1 Sample Characteristics

The final sample for this study consisted of 1196 respondents. Forty-seven percent of these respondents came from the Duxbury and Higgins (2001) sample, 10 percent from the student sample and 43 percent from the Public Service sample. As displayed in Table 9.1, 136 (11%) of respondents were from the Echo generational cohort, 699 (59%) were Generation Xers, 300 (25%) were Baby Boomers, and 56 (5%) were Matures. Since there are no demographic data available specifically for Canadian knowledge workers, it is impossible to determine if this sample is proportionate to the population. The proportions in this study can, however, be compared to the Canadian labour force as a whole. The following proportions were given in chapter five for the four generations' participation in the Canadian labour force: Echo 13%, Xers 34%, Boomers 30%, and Matures 23%.²¹ This means that, relative to the Canadian labour market, Generation Xers are overrepresented in this sample, Matures are highly

²¹ Statistics Canada CANSIM II Table 282-0002

Table 9.1 Generational Breakdown of Sub-samples

Generation		Sub-Sample			Total
		Duxbury & Higgins Sub sample	Student Subsample	Public Service Subsample	
Echo	Count	1	123	12	136 (11.4%)
	% within Generation	.7%	90.4%	8.8%	100.0%
Gen X	Count	223	0	476	699 (58.7%)
	% within Generation	31.9%	0%	68.1%	100.0%
Boomer	Count	282	0	18	300 (25.2%)
	% within Generation	94.0%	0%	6.0%	100.0%
Mature	Count	56	0	0	56 (4.7%)
	% within Generation	100.0%	0%	0%	100.0%
Total	Count	562	123	506	1191
	% within Sample	47.2%	10.3%	42.5%	100.0%

Total valid responses: 1191 Generation not known: 5 Total Sample Size: 1196

underrepresented, and Boomer and Echo respondents are approximately proportionate.

Table 9.2 provides a detailed breakdown of the sample in terms of all of the demographic variables of interest. The sample was comprised of 35 percent male and 65 percent female respondents. Since the Canadian labour force is comprised of 53 percent men and 47 percent women²², women were overrepresented in this sample. In terms of lifecycle stage, 35% were single with no dependent children, 27% were married with no dependent children and 39% were married or single but had dependent children. As one might expect, the proportions in different lifecycle stages varied significantly between generational cohorts. As shown by the shaded areas in Table 9.2, there were very few Mature

²² Statistics Canada CANSIM II Table 282-0002

Table 9.2 Characteristics of the Final Sample

Life Cycle Gender	Echo			Generation X			Baby Boomers			Matures			Row Total
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Single – No Children	64	72	136	70	159	229	10	25	35	1	4	5	405 (34.7%)
Married – No Children	0	0	0	64	174	238	28	37	65	5	2	7	310 (26.6%)
Married or Single Have Children	0	0	0	75	132	207	69	131	200	25	20	45	452 (38.7%)
Total	64	72	136	209	465	674	107	193	300	31	26	57	1167
Total valid responses: 1167 Subjects missing one or more of the above variables: 29 Total Sample: 1196													

respondents who were single without children or married without children. As seen in Table 9.2, data were collected from twelve respondents in the Mature cohort who fell outside the sampling frame. Since data screening procedures described in chapter eight did not identify these respondents as outliers, they were included in the sample in order to provide greater numbers of Mature respondents for analyses related to generation and gender.

9.2 General Values of the Various Generational Cohorts

The mean scores of each generation for each of the 10 Schwartz Value Scale (SVS) value types are given in Table 9.3. The mean scores reported in Table 9.3 correspond to the nine-point SVS scale values. Because negative numbers were included in the calculation of scores, mean value type scores could range from -1 (opposed to my values) to 7 (of supreme importance). Since these rating scores do not, strictly speaking, reflect the element of choice

Table 9.3 Mean SVS Scores by Generation

<u>Echo</u>		<u>Gen X</u>		<u>Boomer</u>		<u>Mature</u>	
Value	Mean	Value	Mean	Value	Mean	Value	Mean
Hedonism	5.39	Self-Direction	5.13	Benevolence	5.24	Benevolence	5.41
Achievement	5.01	Benevolence	5.09	Self-Direction	5.12	Universalism	5.39
Benevolence	4.99	Hedonism	4.97	Universalism	5.07	Self-Direction	5.07
Self-Direction	4.90	Universalism	4.92	Security	4.75	Security	5.03
Conformity	4.76	Achievement	4.85	Conformity	4.62	Conformity	4.97
Security	4.69	Security	4.54	Achievement	4.53	Achievement	4.49
Universalism	4.47	Conformity	4.51	Hedonism	4.49	Hedonism	4.09
Stimulation	4.25	Stimulation	4.36	Stimulation	3.74	Tradition	3.73
Tradition	3.52	Tradition	3.22	Tradition	3.34	Stimulation	3.58
Power	3.12	Power	2.26	Power	1.97	Power	2.13
N=131		N=635		N=300		N=53	

inherent in relative importance measures of value types, we cannot draw meaningful conclusions about the precise hierarchical rank-ordering of value types for each generation. Therefore, values will be discussed in five broader categories according to the importance scores they received. To simplify the presentation of these results, scores will be categorized as follows: -1= 'opposed to respondents' values; 0 to 0.99 'not important;' 1.0 to 2.99= 'somewhat important;' 3.0 to 4.99= 'important;' 5 and above= 'highly important.' Values that were rated 'highly important' are bolded in table 9.3 for emphasis. Since almost 60 percent of the sample belong to the Generation X category, the mean value scores for the total sample offer little utility for analysis as they are heavily influenced by Generation Xers scores. For this reason, means for the total sample are not included in Table 9.3.

These ratings suggest that there are generational differences with respect to the perceived importance of the various general values. For the Echo respondents, hedonism, achievement and benevolence were highly important while the remaining seven values (in decreasing order – self-direction, conformity, security, universalism, stimulation, tradition and power) were all rated as important. For Generation Xers, self-direction, benevolence and hedonism were rated highly important, achievement, security, conformity, stimulation and tradition were rated as important and power was rated as somewhat important. Like the Xers, Boomers rated benevolence and self-direction as highly important, but unlike the Xers, they rated universalism highly important as well. The Boomers rated security, conformity, achievement, hedonism, stimulation and tradition as important and power as somewhat important. Like the Boomers, Matures rated benevolence, universalism and self-direction as highly important, but they rated security and conformity as highly important as well. The Matures rated achievement, hedonism, tradition and stimulation as important and rated power as somewhat important.

Table 9.4 presents respondents' mean scores on the ten SVS value types as well as their overall mean score on each of the four higher order values of openness to change, conformity, self-enhancement and self-transcendence (refer to Section 2.3.4 for definitions of these higher-order values). Recall that

Table 9.4 Mean Values Scores and Higher-order Values by Generation

	Echo	Gen X	Boomers	Matures
Openness to Change	4.86	4.84	4.45	4.23
Self-Direction	4.90	5.13	5.12	5.07
Stimulation	4.25	4.36	3.74	3.58
Hedonism	5.39	4.97	4.49	4.09
Conservation	4.32	4.09	4.25	4.60
Tradition	3.52	3.22	3.34	3.73
Conformity	4.76	4.51	4.62	4.97
Security	4.69	4.54	4.75	5.03
Self-Enhancement	4.53	4.03	3.67	3.57
Power	3.12	2.26	1.97	2.13
Achievement	5.01	4.85	4.53	4.49
Hedonism	5.39	4.97	4.49	4.09
Self-Transcendence	4.73	5.02	5.17	5.40
Benevolence	4.99	5.09	5.24	5.41
Universalism	4.47	4.92	5.07	5.39

these four higher-order values are theorized as two polar dimensions – openness to change versus conformity and self-enhancement versus self-transcendence. The Echo generation, Generation Xers and Baby Boomers all valued openness to change more highly than they did tradition, indicating a preference for dynamism and independence in thought and action to stability, tradition and self-restriction. The opposite was true of the Matures, who valued conservation more than openness to change.

All four generations valued self-transcendence more than they did self-enhancement, which is not surprising given that almost a quarter of respondents rated the value ‘power’ as opposed to their values. This finding signifies that people of all generations place more value on equality and concern for the well-being of others more than they do their own self-interests and dominance of others.

9.3 General Values Differences between Generational Cohorts

Visual inspection of the mean importance ratings for the various values reveals evidence of generational differences. The statistical significance of these differences was tested through MANOVA. As described in section 8.4.2.2, two separate MANOVAs were run. The first one included all respondents and incorporated gender and generation as independent variables. The second included only Generation X and Boomer respondents and incorporated generation, gender and lifecycle as independent variables. The results of each of these analyses are described separately below.

MANOVA 1: Gender by Generation

The results of the 2 X 4 (gender by generation) MANOVA, which included all respondents, are shown in Table 9.5. Using Wilks' criterion, it was found that the interaction effect between gender and generation was not significant ($F(30, 3203)=1.19, p=.220$). The main effect for generation was significant ($F(30, 3279)=9.33, p<.001$) as was that for gender ($F(10, 1091)=3.44, p<.001$). The output for these analyses is shown in Appendix O.

Table 9.5 Summary of Results of Multivariate F-tests for MANOVA 1*

Effect	Significance**
Generation	Significant (p<.001)
Gender	Significant (p<.001)
Generation X Gender	Not significant (p=.220)

*Analyses included all respondents

**Test criterion was Wilks' lambda (p<.05)

These results indicated general values differed significantly between the four generations. General values were also significantly different for men and women²³. There were, however, no unique gender-related values patterns attributable to different generational cohorts.

The strength of association test between revealed that generation explained eight percent of the variance in the ten general values (partial $\eta^2=.08$). Gender, on the other hand, explained only three percent of the variance in general values (partial $\eta^2=.03$).

Results of univariate F-tests for the general values variables show that significant generational differences are evident for the nine of the ten value types: power, hedonism, stimulation, universalism, benevolence, tradition, conformity, security and achievement (p<.05). No significant generational difference was found for the value self-direction (p=.203).

Post hoc tests were conducted to assess pairwise differences in the mean value scores of the various generations using the Scheffe adjustment for Type-I error. The results of post-hoc tests for each of the ten values are presented

below, grouped according to the four higher-order values. All results reported here are at the $p < .05$ level of significance. The mean scores for men and women of each generation are shown in Table 9.6.

Self-Enhancement Values

The self-enhancement values involve the pursuit of success, pleasure and dominance over others (Schwartz, 1996). The three values that comprise this higher-order value are power, hedonism and achievement. The value 'power,' was rated as significantly more important by the Echo generation (mean=3.12) than by Generation Xers (mean=2.26), Boomers (mean=1.97) and Matures (mean=2.13). Also, Generation Xers rated power significantly higher in importance than did Boomers. Hedonism was also rated significantly higher by the Echo generation (mean=5.39) than by Xers (mean=4.97), Boomers (mean=4.49) and Matures (mean=4.09). The differences between Generation Xers and Boomers and Generation Xers and Matures on the value hedonism were also significant. The importance of the value 'achievement,' also appears to decline with age, as significant differences were found between the Echo

²³ As gender is not a main focus of this thesis, gender differences in individual general and work value items (i.e. univariate F-test results for gender) are not elaborated in this thesis.

generation (mean=5.01) and Boomers (mean=4.53) and Echo and Matures (mean=4.49), as well as between Generation Xers (mean=4.85) and Boomers. The overall pattern suggested by these results is that self-enhancement is more important to the younger generations (i.e. Echo and Xers) than it is to the older generations (i.e. Boomers and Mature).

Self-Transcendence Values

Universalism and benevolence comprise the higher-order value 'self-transcendence,' which concerns equality and concern for the well-being of others (Schwartz, 1996). Self-transcendence is theoretically opposed to self-enhancement in Schwartz's (1992, 1994) model.

As opposed to the results observed with respect to power the self-enhancement values, universalism was rated significantly more important by Matures (mean=5.39) than by Generation Xers (mean=4.92) or the Echo generation (mean=4.47). The difference between the Echo and Boomers (mean=5.07) was also significant. While the univariate F-test indicated a significant generational difference for the value benevolence, no significant differences were noted in post-hoc tests. The trend suggested by the mean value scores for these variables is that older generations value self-transcendence more than do the younger generations. This result lends support to the theorized opposition between self-enhancement and self-transcendence values.

Openness to Change Values

Self-direction, stimulation and hedonism comprise the higher-order value 'openness to change,' which is concerned with change and independence in thought and action (Schwartz, 1996). As noted above, the univariate F-tests indicated no significant overall generational differences in the value self-direction. Post-hoc tests also revealed no significant differences between any two generations on this value. The value stimulation was rated significantly more important by the Echo generation (mean=4.25) than by Boomers (mean=3.74) or Matures (mean=3.58). Stimulation was also rated more important by Generation Xers (mean=4.36) than by Boomers or Matures. The trend indicated here is less value placed on openness to change by the older generations than by the younger ones.

Conformity Values

The values security, conformity and tradition comprise the higher-order value of conservation, which concerns self-restriction, stability and the preservation of tradition (Schwartz, 1997). Only one significant inter-generational difference was detected with respect to the value security. Matures (mean=5.03) valued security significantly more than did Generation Xers (mean=4.54). The same was true of the value conformity, which was valued significantly more by Matures (mean=4.97) than by Generation Xers (mean=4.51). No significant

differences were observed for the value tradition, despite the fact that the univariate F-test indicated significant overall generational differences. No strong overall generational pattern was observed for this set of values

MANOVA 2: Gender by Generation by Lifecycle

As shown in Table 9.7, the results of the 2 X 3 X 2 (gender by lifecycle by generation) MANOVA for Generation Xers and Baby Boomers revealed a different story. Using Wilks' Lambda as the test criterion and a significance level of $p < .05$, it was found that the three-way interaction between gender, lifecycle and generation was not significant ($F(20, 1806) = 1.32, p = .156$). Two of the three two-way interactions were not significant. The two-way interaction between gender and lifecycle was not significant ($F(20, 1806) = 0.884, p = .608$), nor was that between generation and gender ($F(10, 903) = 1.78, p = .061$). There was, however, a significant two-way interaction between generation and lifecycle stage ($F(20, 1806) = 2.03, p = .005$). The main effects for generation ($F(10, 903) = 10.73, p < .001$), gender ($F(10, 903) = 4.64, p < .001$) and lifecycle ($F(20, 1806) = 2.33, p = .001$) were significant. The output for this MANOVA is given in Appendix P.

These results suggest the following:

1. The relationship between lifecycle stage and general values was different for Boomers than for Generation Xers;

Table 9.7 Summary of Results of MANOVA 2 – Generation by Lifecycle by Gender*

Effect	Significance
Generation	Significant (p<.001)
Gender	Significant (p<.001)
Lifecycle	Significant (p=.001)
Generation X Lifecycle	Significant (p<.005)
Generation X Gender	Significant (p<.061)**
Lifecycle X Gender	Not Significant (p=.608)
Generation X Lifecycle X Gender	Not significant (p=.156)

*Analysis included only Generation Xers and Baby Boomers

**Significant only at the p<.10 level

2. The relationship between gender and general values was different for Boomers than for Generation Xers (at the p<.10 level of significance);
3. On the whole, there was no significant difference in the general values of men and women within a given lifecycle stage;
4. No differences were found in general values between men and women in different lifecycle stages within the Generation X and Boomer generations.

The strength of association measure revealed that generation explained 10.6 percent of the variance in the ten general values (partial $\eta^2=.106$). By comparison, lifecycle explained only 2.5 percent of the variance in general values (partial $\eta^2=.025$). Gender explained five percent of the variance in general values (partial $\eta^2=.049$).

Further Analyses of Interaction Effects

Because a significant interaction effect was observed between generation and lifecycle, two additional sets of analyses were performed to more closely examine the relationship between these variables. First, univariate F-tests were conducted for all ten of the general values with the interaction between

Table 9.8 Univariate F-test of Generation by Lifecycle Interaction

Value	Significance of interaction
Power	.148
Achievement	.000
Hedonism	.028
Stimulation	.007
Self-Direction	.012
Universalism	.406
Benevolence	.210
Tradition	.573
Conformity	.615
Security	.797

generation and lifecycle as the dependent variable. These tests examined whether groups formed by the combination of generation and lifecycle differed significantly on each of the general values. In other words, the tests determined whether different lifecycle-related patterns in general values were evident for Boomers than for Generation Xers. These tests revealed significant interaction effects for four of the ten variables: hedonism, stimulation, self-direction and achievement, as shown in Table 9.8.

In order to identify the precise nature of the interaction effects, the mean general value scores of Generation Xers in each of the three lifecycle categories were subjected to pairwise comparisons in order to identify significant differences between lifecycle stages. An identical set of pairwise comparisons was conducted for Boomers. Both sets of comparisons used the Scheffe adjustment for Type-I error and a significance level of $p < .05$. The results of these two sets of pairwise comparisons (shown in Appendix Q) were then examined to identify

differences in the lifecycle-related values patterns of the two generations. The following differences were discovered:

- Achievement was valued more by Boomers with children (mean=4.64) than by single Boomers without children (mean=4.04), while single Generation Xers without children (mean=5.00) valued achievement more than did Generation Xers with children (mean=4.66);
- Hedonism was valued more by single Generation Xers with no children (mean=5.16) than by Gen Xers with children (mean=4.74), while Boomers showed no lifecycle differences on the value hedonism;
- Stimulation was valued more by single Generation Xers with no children (mean=4.77) than by married Generation Xers with no children (mean=4.34) and Generation Xers with children (mean=3.94). The difference between married Gen Xers with no children and Gen Xers with children was also significant. Boomers, on the other hand, showed no lifecycle differences in the value stimulation; and
- Self-Direction was valued more by single Generation Xers with no children (mean=5.39) than by married Generation Xers with no children (mean=5.14) and Generation Xers with children (mean=4.82). The difference between married Gen Xers with no children and Gen Xers with children was also significant. Boomers, showed no lifecycle differences in the value self-direction.

To further assess the interactions between lifecycle and generation, two sets of MANOVAs were run. First, separate 2 X 3 between-subjects MANOVAs were run for men and women. Generation (Xer, Boomer) and lifecycle (single

Table 9.9 Summary of Results – Separate Male and Female MANOVAs

Effect	Female Sub-Sample	Male Sub-Sample
Generation	Significant ($p < .001$)	Significant ($p < .001$)
Lifecycle	Significant ($p < .001$)	Not significant ($p = .212$)
Generation X Lifecycle	Not significant ($p = .119$)	Significant ($p = .018$)

*Analysis included only Generation Xers and Baby Boomers,

no children, married no children, single/married with children) were the independent variables and the ten general value types were the dependent variables. Since the Mature and Echo generations were not represented in all lifecycle categories, these two generations were omitted from the analyses.

The results of these MANOVAs, shown in Table 9.9, showed different significant main effects and interaction effects for men and women. The multivariate F-test for women showed no significant interaction effect between generation and lifecycle ($F(20,1214)=1.39, p=.119$). There was, however, a significant main effect for generation ($F(10, 607)=6.98, p<.001$), and a significant main effect for lifecycle ($F(20,1214)=2.35, p=.001$). The output for these analyses is given in Appendix R. These results indicated that general values differed significantly between Boomer and Generation X women, and between women in different lifecycle stages, but the effect of lifecycle did not vary between generations. This indicated that female respondents were not the source of the interaction effect between generation and lifecycle.

The MANOVA for the male respondents had more complex results. The multivariate F-test for men, using Wilks' Lambda as the test criterion, showed a

significant interaction effect between generation and lifecycle ($F(20,574)=1.79, p=.018$). A significant main effect was observed for generation ($F(10, 287)=5.91, p<.001$). However, no significant main effect was detected for lifecycle ($F(20,574)=1.24, p=.212$). This indicated that, for men, the impact of generation on general values depended on their lifecycle stage.

The complexity of interactions for male respondents merited further investigation. In order to precisely identify the nature of these interactions, another set of MANOVAs were run on homogeneous subsets within the sample. One-way MANOVAs were run for men in each lifecycle stage with generation (Boomer, Generation X) as the independent variable and the ten value types as dependent variables. In other words, three separate MANOVAs were run: one for single men with no children, one for married men with no children, and one for single/married men with children. The output for these MANOVAs is given in Appendix S.

Results of the MANOVAs (multivariate $F, p<.05$), which are shown in Table 9.10, revealed that, for men, general values varied significantly by generation for all lifecycle stages except for one – married or single men with children ($F(10, 127)=1.146, p=.164$). For this group, there were no significant differences in the general values of Generation Xers and Baby Boomers. These findings seemed to indicate that fatherhood had a unifying effect on the general values of Boomer and Generation X men. In other words, for Generation X and

Table 9.10 Significance levels of Multivariate F-Tests – Male Sub-Sample

	Single no Children	Married no Children	Single or Married have Children
Generation	.003*	.002*	.164

*Main effect for generation is significant at the $p < .05$ level.
The test criterion was Wilks' Lambda

Boomer men, there appears to be a pattern of general values associated with fatherhood.

Univariate Analyses of General Values Differences between Boomers and Xers

As a follow-up to the multivariate tests described above, univariate F-tests were conducted in order to examine specific value differences between Generation Xers and Baby Boomers. Because of the gender and lifecycle interactions described above, Male and female respondents were analyzed separately.

The univariate F-tests for women revealed that Generation X and Boomer women differed significantly on seven of the ten general values ($p < .05$), as shown in Table 9.11. Generation X women rated all three of the self-enhancement values (power, hedonism and achievement) more important than did Boomer women. Boomer women rated both of the self-transcendence values (universalism and benevolence) higher than did Generation X women. The only significant difference related to the conservation values (security, conformity and tradition) was that Boomer women rated security higher in importance than did Generation X women. With respect to the openness to change values

Table 9.11 General Values Differences - Generation X and Boomer Women

	Generation Xers Mean Score	Boomers Mean Score	Significance of Difference
Self-Enhancement Values			
Power	2.14	2.00	.007
Hedonism	4.98	4.44	.000
Achievement	4.89	4.67	.005
Self-Transcendence Values			
Universalism	5.04	5.22	.025
Benevolence	5.17	5.35	.027
Openness to Change Values			
Stimulation	4.37	3.70	.000
Self-Direction	5.19	5.15	.736
Hedonism	4.98	4.44	.000
Conservation Values			
Tradition	3.23	3.35	.889
Conformity	4.48	4.70	.200
Security	4.51	4.80	.039

Significant differences ($p < .05$) are bolded

(stimulation, self-direction and hedonism), Generation X women rated both hedonism and stimulation more important than did Boomer women.

Because of the significant interaction effects observed between lifecycle stage and gender in male Boomer and Generation X respondents, it is not possible to discuss generational differences for men on the whole. Therefore, differences between Generation X and Boomer men will be discussed here only with respect to the two lifecycle stages for which significant generational differences were observed (i.e. single with no children and married with no children). The mean values scores for Generation X and Boomer men in these two lifecycle stages are presented in Table 9.12.

Looking first at single men with no children, we see that generational differences were evident in three of the ten general values. Differences were

Table 9.12 General Values Differences between Generation X and Boomer Men

	Single no Children			Married no Children		
	Generation Xers (N=66)	Boomers (N=10)	Significance of Difference	Generation Xers (N=60)	Boomers (N=28)	Significance of Difference
Self-Enhancement Values						
Power	2.68	1.97	.119	2.48	1.70	.008
Hedonism	5.03	4.00	.035	4.84	4.84	.994
Achievement	4.95	3.35	.004	4.75	4.17	.029
Self-Transcendence Values						
Universalism	4.91	4.90	.979	4.47	5.17	.006
Benevolence	5.12	4.78	.288	4.79	5.23	.066
Openness to Change Values						
Stimulation	4.66	3.40	.004	4.26	4.04	.476
Self-Direction	5.28	4.64	.062	4.90	5.40	.010
Hedonism	5.03	4.00	.035	4.84	4.84	.994
Conservation Values						
Tradition	3.34	3.88	.227	2.98	3.26	.348
Conformity	4.81	4.28	.180	4.42	4.44	.931
Security	4.68	4.64	.910	4.41	4.59	.528

Significant differences ($p < .05$) are bolded

observed in two of the three self-enhancement values, hedonism and achievement). Generation Xers rated hedonism (mean=5.03) more important than Boomers did (mean=4.00). Generation Xers also rated achievement (mean=4.95) more important than the Boomers did (mean=3.35). In addition to the difference that was observed with respect to hedonism, a significant difference was seen with respect to stimulation, one of the other two openness to change values. Generation Xers rated stimulation (mean=4.66) higher in importance than the Boomers did (mean=3.40). No significant differences were observed in any of the self-transcendence or conservation values. These differences should be interpreted carefully, as the low number of single Boomer men with no children (there were only ten) has resulted in lowered statistical power for these F-tests and may also affect the generalizability of these findings.

A different pattern of inter-generational differences was observed for the married men without children. Within this lifecycle stage, Generation X and Boomer men differed significantly on four of the ten general values. Differences were observed in two of the three self-enhancement values (i.e. power and achievement). Generation Xers rated power (mean=2.48) more important than Boomers did (mean=1.70). Achievement was rated higher in importance by Generation Xers (mean=4.75) than by Boomers (mean=4.17). Boomers rated the self-transcendence value of universalism (mean=5.17) more important than the Generation Xers (mean=4.47) did. Finally, the openness to change value self-direction was rated more important by Generation Xers (mean=5.40) than by Boomers (mean=4.90). No significant differences were observed in any of the conservation values.

General Values Content

As discussed in section 8.4, the content of general values for the various generations was assessed by analyzing the negative scores that were given by the members of various generations to the 44 general values items in the SVS. For 21 of the 44 SVS items, at least one respondent indicated that the item was opposed to their values. However, only four of these 21 values were opposed to the values of more than one percent of respondents – ‘social power’ (opposed by 26.1%), ‘accepting my portion in life’ (opposed by 9.2%), ‘moderate’ (opposed by

1.8%) and 'daring' (opposed by 1.4%). Since the latter two of these values were opposed by so few respondents, no further analysis was conducted on them.

For the items 'social power' and 'accepting my portion in life,' logistic regression analyses were conducted with binary variables (accepting the value item, opposing the value item) as the dependent variables and generation, lifecycle and gender as the independent variables. The two-way interactions between generation and gender and generation and lifecycle and the three-way interaction between gender, generation and lifecycle were also included in the analyses. The SPSS output for these analyses are given in Appendix T. For both of these regression analyses, none of the main effects for generation, gender or lifecycle were significant, nor were any of the two-way or three-way interactions between these variables. This signifies that there was no significant difference between generations in their opposition to either of these variables.

9.4 Work Values of the Various Generational Cohorts

Table 9.13 provides the mean value ratings for each of the six work value factors for each generation, as well as the various work value items that comprise each factor. As discussed in chapter eight, means for the six work values factors were calculated as the summed average of the items comprising each factor. The possible values of the combined work values scores ranged from 0 (indicating that a work values factor is neither important nor a priority to respondents) to 7 (indicating that the factor is both important and a priority).

Table 9.13 – Work Values Scores for the Various Generations

	Echo	Gen X	Boomers	Matures
Intrinsic Work Values	4.85	5.19	5.05	5.00
Intellectually Stimulating	4.61	5.40	5.17	5.02
Challenge	4.79	5.37	5.05	4.91
Interesting	5.29	5.62	5.34	5.18
Continuously Learn	5.21	5.55	5.05	4.89
Fulfilling	4.90	5.38	5.37	5.33
Accomplishment	4.99	5.26	5.39	5.35
Use the Abilities	4.67	4.89	4.96	5.15
Variety	4.51	4.86	4.68	4.29
Creativity	4.15	4.50	4.40	4.57
Extrinsic Work Values	5.24	5.34	5.25	5.18
Benefits	5.13	5.46	5.41	5.18
Salary	5.55	5.30	5.18	5.05
Job Security	5.06	5.19	5.13	5.02
Status-Related Work Values	4.03	3.44	3.13	3.43
Authority	3.57	2.85	2.56	2.74
Prestigious	4.09	3.14	2.95	3.35
Influence	3.95	3.96	3.78	4.04
Travel	4.05	3.05	2.03	2.13
Recognition	4.70	4.44	4.25	4.43
Altruism Work Values	4.60	5.02	5.21	5.53
Moral Values	4.67	5.10	5.44	5.76
Contribution	4.00	4.81	4.73	5.05
Fairness	5.04	5.10	5.43	5.56
Freedom-Related Work Values	4.68	4.68	4.80	4.65
Hours of Work	4.96	5.40	5.18	4.84
Balance	5.30	5.77	5.69	5.17
Work Alone	3.77	3.64	3.61	4.00
Social Environment at Work	5.02	4.64	4.26	4.23
Fun	4.97	4.55	4.11	3.85
Co-Workers	5.09	4.74	4.37	4.46

Intermediate scores represent the varying degrees of value that individuals place on a work values factor given both its importance to them and its likelihood of being a priority in decision-making. Because this measure contains elements of both intensity and relative importance, the scores give us an indication of the rank order of the various values for each generation. While this is an imperfect proxy for actual ranking data, it does provide more information than the intensity scales alone.

For the sake of this discussion, work values scores will be categorized as follows: 0 to 0.99 'not valued;' 1.0 to 2.99= 'somewhat valued;' 3.0 to 4.99= 'valued;' 5 and above= 'highly valued.' As Table 9.13 shows, all work values were either valued or highly valued by members of the various generations.

The Echo generation valued compensation-related work values most highly, with salary being the most valued work values item overall. They also placed high value on the social environment of work, particularly valuing friendly coworkers.

For Generation Xers, Boomers and Matures, compensation-related work values, intrinsic work values and altruism were all highly valued, though the order varied between cohorts. Specifically, Xers placed the most value on compensation, particularly benefits. Boomers also valued compensation most, followed closely by altruism values. Matures valued altruism the most, with work that is consistent with one's moral values being the most valued item overall.

It is notable that the Echo generation valued the social environment highly but valued altruism less than all work values other than status. The opposite was true for the three older generations, who placed more value on altruism than the social work environment. It is also notable that while Generation Xers and Boomers valued freedom-related values moderately overall, work-life balance was the most highly valued work value item for both generations.

9.5 Work Values Differences between Generational Cohorts

To identify whether generational differences in work values were evident when the impact of gender and lifecycle are taken into account, two MANOVAs were conducted with the six work values factors as dependent variables (see section 8.4). Each is discussed below.

MANOVA 1: Gender by Generation

The first MANOVA, incorporating all respondents, was a 2 X 4 between-subjects MANOVA with gender (male, female) and generation (Echo, Generation X, Boomer and Mature) as the independent grouping variables and the six values factors as the set of dependent variables. The results of this analysis are given in Appendix U. In this analysis, using Wilks' Lambda as the criterion, the interaction effect between gender and generation was not significant ($F(18, 2749)=0.78, p=.723$). The main effect for gender was significant ($F(6, 972)=6.61, p<.001$), as was the main effect for generation ($F(18, 2749)=8.95, p<.001$). This indicated that work values differed significantly between generations and between men and women, but the relationship between generation and work values was not significantly different between men and women.

Univariate F-tests revealed significant generational differences for four of the six work values factors. Significant generational differences were found for work status ($p<.05$), altruism ($p<.05$), social work environment ($p<.05$) and

Table 9.14 Mean Work Values Scores by Generation and Gender

Gender	Echo			Generation X			Baby Boom			Matures		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Status	4.01	4.04	4.03	3.54	3.39	3.44	3.20	3.09	3.13	3.55	3.27	3.43
Altruism	4.39	4.77	4.60	4.68	5.17	5.02	4.88	5.43	5.21	5.29	5.85	5.53
Social	4.91	5.10	5.02	4.45	4.72	4.64	4.15	4.33	4.26	4.20	4.26	4.23
Intrinsic	4.59	5.07	4.85	4.88	5.34	5.19	4.91	5.13	5.00	4.90	5.12	5.00
Extrinsic	5.22	5.27	5.25	5.20	5.40	5.34	5.23	5.26	5.25	5.14	5.24	5.18
Freedom	4.68	4.75	4.72	4.68	5.07	4.95	4.80	4.90	4.86	4.65	4.83	4.73

intrinsic work values ($p < .10$). No significant generational effect was found for extrinsic work values ($p = .867$) or freedom at work ($p = .601$).

Post hoc multiple comparisons using the Scheffe adjustment for Type-I error ($p < .05$) were used to conduct follow-up analyses. The mean work value scores used in these comparisons are given in Table 9.14. Key findings include the following:

- Intrinsic work values were valued more by Generation Xers (mean=5.19) than by Echo respondents (mean=4.85).
- The value placed on status was found to decline with increasingly older generations. Echo respondents valued status (mean=4.03) more than did Generation Xers (mean=3.44), Boomers (mean=3.13) and Matures (mean=3.43). The difference between Generation Xers and Boomers was also significant.
- Altruism was valued significantly less by Echo respondents (mean=4.60) than by Generation Xers (mean=5.02), Boomers (mean=5.21) and Matures (mean=5.53). While differences in altruism scores between Generation Xers and Boomers and Boomers and Matures were not significant, the difference between Generation Xers and Matures was.

- The value placed on the social environment at work declined with increasingly older generations. Echo respondents valued the social environment of work (mean=5.02) significantly more than did Boomers (mean=4.26) and Matures (mean=4.23). Also, Generation Xers valued the social work environment significantly more (mean=4.64) than did Boomers (mean=4.26).

The association between the main effect of generation and the set of work values was low (partial $\eta^2=.052$), indicating that generation explained only five percent of the variance in the six work values factors. By comparison, gender explained four percent of the variance in general values (partial $\eta^2=.039$).

MANOVA 2: Gender by Lifecycle by Generation - Boomers & Generation Xers

The second MANOVA, involving just Boomers and Generation Xers, was a 2 X 3 X 2 between subjects MANOVA with gender (male, female), lifecycle stage (single no children, married no children, single/married with children) and generation (Generation X, Baby Boom) as the independent variables and the six work values factors as the set of dependent variables. The results of this analysis are given in Appendix V. In this analysis, the multivariate F test using Wilks' Lambda as the criterion revealed no significant two-way or three-way interaction effects ($p<.05$). Significant main effects were observed for generation ($F(6, 811)=4.73, p<.001$) and gender ($F(6, 811)=6.54, p<.001$), but not for lifecycle ($F(12, 1622)=1.53, p=.105$).

Table 9.15 Mean Work Values Scores by Gender and Lifecycle Stage – Generation X and Baby Boomers

Generati on X	Single No Children			Married No Children			Single/Married with Children			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Intrinsic	5.07	5.54	5.41	4.81	5.36	5.21	4.77	5.05	4.98	4.88	5.34	5.19
Extrinsic	5.19	5.32	5.28	5.32	5.43	5.40	5.10	5.47	5.22	5.20	5.40	5.34
Status	3.60	3.70	3.67	3.61	3.35	3.43	3.43	3.06	3.20	3.54	3.39	3.44
Altruism	4.95	5.29	5.19	4.48	5.12	4.94	4.64	5.08	4.91	4.68	5.17	5.02
Freedom	4.61	4.92	4.83	4.62	5.12	4.98	4.79	5.19	5.04	4.68	5.07	4.95
Social	4.56	4.99	4.87	4.40	4.70	4.62	4.41	4.39	4.40	4.45	4.72	4.64
Baby Boomers	Single No Children			Married No Children			Single/Married with Children			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Intrinsic	4.77	5.14	5.03	5.16	5.11	5.13	4.83	5.14	5.02	4.91	5.13	5.05
Extrinsic	5.31	5.02	5.11	5.09	5.12	5.10	5.28	5.36	5.33	5.23	5.26	5.25
Status	3.18	2.96	3.03	3.01	2.87	2.93	3.28	3.18	3.22	3.20	3.09	3.13
Altruism	4.85	5.51	5.31	5.09	5.40	5.26	4.81	5.42	5.18	4.88	5.43	5.21
Freedom	4.81	4.48	4.58	4.91	4.53	4.71	4.75	5.09	4.96	4.80	4.90	4.86
Social	4.44	4.39	4.41	4.47	4.26	4.36	3.98	4.33	4.30	4.15	4.33	4.26

In this analysis, the association between the main effect of generation and the set of work values was low (partial $\eta^2=.034$), indicating that generation explained only three percent of the variance in the six work values factors. By comparison, lifecycle explained only one percent of the variance in general values (partial $\eta^2=.011$), while gender explained almost five percent (partial $\eta^2=.046$).

Univariate F tests for the six work factors revealed that, at the $p<.05$ level of significance, differences were evident between Boomers and Generation Xers on two of the work values factors – status and altruism. Mean scores on each of the six work values factors are given in Table 9.15. Differences between the cohorts on the value of social work environment were significant at the $p<.10$ level of significance. Specifically, status in the workplace was valued more by

Generation Xers (mean=3.44) than by Boomers (mean=3.13). Generation Xers also valued the social work environment significantly more (mean=4.64) than did Boomers (mean=4.26). Note that both of these differences were also significant in MANOVA 1 as discussed above. Altruism was valued more by Boomers (mean=5.21) than by Generation Xers (mean=5.02). This difference was not significant in MANOVA 1 when lifecycle was omitted.

Work Values Content

To assess the dimension of work values content, values that received negative scores in either the importance or priority work values scales were separated and coded as binary variables (opposed to the value or not opposed to the value). Examination of the negative scores indicated that the 31 work values items were fairly universally held by respondents. Of the 31 work values items, only 17 were rated by at least one respondent as opposed to their values. Of these 17 items only four were rated negatively by more than one percent of respondents: 'authority' (1.7% opposed), 'work alone' (2.8% opposed), 'prestigious' (2.2% opposed) and 'travel' (2.4% opposed). Three of these variables were classified together as status-related items. This reinforces the earlier finding that different generations viewed status differently.

In order to determine whether there are response patterns to respondents' opposition to the four work values items mentioned above, logistic regression was performed on each of the four items. The dependent variables were binary

variables (opposed to the item, accepting the item) with generation, gender and lifecycle as independent variables. The two-way interactions between generation and gender and generation and lifecycle and the three-way interaction between gender, generation and lifecycle were also included in the regression models.

The SPSS outputs for these four regressions are given in Appendix W. None of the main effects for any of the independent variables were significant at the $p < .05$ level in any of these analyses. Furthermore, none of the interaction effects were significant. This indicates that there is no generational pattern evident in respondents' opposition to these four work value items.

9.6 *Protestant Work Ethic Adherence for Various Generations*

The mean scores on each of the four PWE factors are given in Table 9.16 for each generation. The scale ranged from 0 (strongly disagree) to 6 (strongly agree). For the purposes of this discussion, scores ranging from 0 to 3 will be labeled 'disagreement,' 3 will be labeled 'neutral' and 4 to 6 will be labeled 'agreement.'

As can be seen, all generations disagreed with the anti-leisure, asceticism and independence dimensions of the PWE, but were in agreement with the hard-work dimension. The value placed on hard work showed a clear pattern of decline with increasingly older generations. The Echo generation showed the highest level of agreement with the hard work dimension of the PWE (mean=4.27), while the Matures showed the lowest level of agreement

Table 9.16: Descriptive Statistics for Protestant Work Ethic Factors by Generation

	Echo		Gen X		Boomer		Mature	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Anti-Leisure	2.00	1.07	1.68	1.08	1.93	1.11	2.47	1.20
Asceticism	2.22	1.10	2.61	1.19	2.77	1.29	2.92	1.11
Hard Work	4.27	0.94	4.12	1.00	4.15	0.99	3.61	1.17
Independence	2.64	1.19	2.07	1.14	2.14	1.20	2.14	1.30
N	126		626		249		42	

(mean=3.61). The level of agreement of the Generation Xers (mean=4.12) and Boomers (mean=4.15) fell in between these two generations.

The opposite pattern was observed for the asceticism dimension of the PWE, with increasingly older generations agreeing more strongly. Matures were the most in agreement with the notion of asceticism (mean=2.92), followed by Boomers (mean=2.77), Generation Xers (mean=2.61), and Echo (mean=2.22).

No clear trends were observed for the anti-leisure or independence dimensions of the PWE. Generation Xers were in strongest disagreement with the anti-leisure value (mean=1.68), followed by Boomers (mean=1.93), Echo (mean=2.0) and Matures (mean=2.47). Echo respondents were most in agreement with the value of independence (mean=2.64), followed by Matures and Boomers (mean=2.14 for both) and Generation Xers (mean=2.07).

9.7 Generational Differences in Adherence to the Protestant Work Ethic

In order to assess the significance of generational differences in adherence to the various dimensions of the PWE, two MANOVAs were

conducted as described in section 8.2. The results of these MANOVAs are described below.

MANOVA 1: Gender by Generation

The first analysis was a 2 X 4 between subjects MANOVA with gender (male, female) and generation (Echo, Generation X, Boomers, Matures) as the independent variables and the four PWE factors as the dependent variables. The output for this analysis is given in Appendix X. Results of the multivariate F-tests with Wilks' lambda as the test criterion ($p < .05$) showed no significant interaction effect between gender and generation ($F(12, 2548) = .981, p = .464$). A significant main effect was observed for generation ($F(12, 2548) = 6.17, p < .001$), but the main effect for gender was not significant ($F(4, 963) = .945, p = .437$). The strength of association measures indicated that generation explained more of the variance than did gender (partial $\eta^2 = .025$ and $.004$ respectively).

Univariate F-tests were used to follow up on the significant main effects for generation. This analysis revealed significant generational differences in three of the four PWE dimensions at the $p < .05$ level – asceticism, anti-leisure and independence. No significant generational differences were observed for the dimension of hard work.

Post-hoc tests using the Scheffe adjustment for multiple comparisons ($p < .05$) revealed a number of significant generational differences. The means used in these tests are given in Table 9.17. Generation Xers disagreed with the

Table 9.17 Mean PWE Scores by Gender and Generation

	Echo			Generation X			Baby Boom			Matures		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Anti-Leisure	2.07	2.00	2.03	1.62	1.65	1.64	2.07	1.89	1.89	2.35	2.35	2.35
Asceticism	2.00	2.47	2.26	2.63	2.61	2.62	2.85	2.74	2.78	3.03	2.91	2.98
Hard Work	4.18	4.22	4.20	4.24	4.11	4.15	4.20	4.18	4.19	3.82	3.73	3.79
Independence	2.57	2.58	2.58	2.32	2.02	2.12	2.38	2.11	2.22	2.58	2.33	2.48

anti-leisure dimension of the PWE (mean=1.64) significantly more than did than the Echo generation (mean=2.03), Boomers (mean=1.89) and Matures (mean=2.35), indicating that Generation Xers put more value on leisure than do all of the other generations. The difference between Matures and Boomers was also significant, which means that Matures agreed with the anti-leisure ethic significantly more than did Boomers.

The Echo generation was significantly less in agreement with the asceticism dimension of the PWE (mean=2.26) than were Generation Xers (mean=2.62), Boomers (mean=2.78) or Matures (mean=2.98). The differences between Boomers, Generation Xers and Matures were not significant.

Finally, the Echo generation agreed with the independence dimension of the PWE significantly more (mean=2.58) than did Generation Xers (mean=2.12). The differences between Echo and Boomers and Matures were not significant.

MANOVA 2: Gender by Lifecycle by Generation

The second analysis performed was a 2 X 3 X 2 between-subjects MANOVA with gender (male, female), lifecycle (single no children, married no children, single/married with children) as the independent grouping variables and the four PWE factors as the dependent variables. The results of this analysis, shown in Appendix Y, indicate that the three-way interaction between

lifecycle, generation and gender was not significant at the $p < .05$ level. The two-way interaction effects between gender and lifecycle, generation and lifecycle and gender and generation were also not significant. The main effect for generation was not significant ($F(4, 806) = 1.62, p = .168$), nor were those for lifecycle ($F(8, 1612) = 1.57, p = .128$) nor gender ($F(4, 806) = 1.11, p = .352$). These results indicate that, when the impact of lifecycle is taken into consideration, the difference between Baby Boomers and Generation Xers on the anti-leisure dimension of the PWE that was observed in MANOVA 1 is no longer significant.

This chapter presents a discussion of the findings of this thesis and their importance to the broader understanding of generational differences in life and in work. The chapter begins with a discussion of the general values profiles of the various generations and the differences that were observed between generations. The work values held by the members of the various generations are then considered, followed by a discussion of the inter-generational differences in work values that were observed. The chapter concludes with a discussion of the generational patterns that were found with respect to the values of the Protestant work ethic.

10.1 General Values of the Various Generational Cohorts

Overviews of the general values that are attributed to the various generations in the generational literature were presented in chapter five. Each generation is discussed in turn below with reference to the findings of this study and in comparison to the generational caricatures presented in chapter five.

10.1.1 Matures

The Matures, who were born prior to 1946, have been characterized as a generation that values loyalty, authority, discipline and tradition. Thus, in terms of the ten values studied in this thesis, they might be expected to value tradition, conformity and security, which Schwartz (1992, 1994) termed 'conservation

values'. Conversely, they would be expected to place little value on stimulation, hedonism and self-direction – Schwartz's (1992, 1994) 'openness to change' values. The matures have also been purported to value teamwork, self-sacrifice and deferral of gratification, values more in keeping with Schwartz's (1992, 1994) 'self-transcendence' values of benevolence and universalism than the opposing 'self enhancement' values of achievement and power.

The results show that, as might be expected, Matures did value benevolence and universalism highly, while achievement was moderately important, and power was low in importance. Their overall scores on the higher-order values show that they valued self-transcendence much more than they did self- enhancement. Thus, the characterization of Matures as self-transcendent rather than self-indulgent appears to be accurate. This signifies that Matures are indeed willing to sacrifice their own pleasure, advancement and self interests in the interests of others, particularly those people that are closest to them. Also as expected, the Matures valued security and conformity as highly important, though they placed only moderate importance on the value of tradition. In terms of the higher-order values of openness to change and conformity, Matures were the only generation with a higher mean score on conservation than on openness to change. Thus, the characterization of Matures as cautious, traditional and favouring stability appears to be true, though the moderate value placed on tradition might suggest that they are not as traditional as the literature indicates.

10.1.2 *Baby Boomers*

Boomers are portrayed in generational literature as idealistic and concerned with positive social change. They are also depicted as adamant non-conformists who are both hedonistic and highly achievement-oriented, and relentlessly concerned with self-fulfillment. In terms of the ten SVS values, it might be expected that Boomers would value self-direction and hedonism highly as well as universalism and achievement. Conversely, they would be expected to eschew conformity and tradition. With respect to the higher-order values, Boomers would be likely to value openness to change over conservation. The dimension of self-enhancement versus self-transcendence is less clear where the Boomers are concerned, as their purported desire for achievement and pleasure appears to be balanced with a concern for the good of society as a whole.

The results of this thesis show that Boomers do indeed prefer the values associated with openness to change to those associated with conservation, but the difference in the value they placed on these higher-order values was not great. Not surprisingly, the value they placed on tradition was moderate, while self-direction was highly valued. It is somewhat surprising, given the depictions of Boomers as active and risk taking individuals that they placed only moderate importance on stimulation, a value concerned with novelty, excitement and challenge in life. Perhaps this is indicative of the Boomers' current age, at which excitement and novelty are likely to give way to stability and moderation.

Given the portrayal of Boomers in the literature, the relatively low value they placed on *power* is somewhat surprising. This appears to be largely attributable to the high number of respondents who rated the value item 'social power' as opposed to their values. Although power was rated as only somewhat important to Boomers, the other two value types comprising the higher-order value of self-enhancement – achievement and hedonism – were rated moderately high in importance. Both self-transcendence values – benevolence and universalism – were rated as very important by the Boomers. This is consistent with the depiction of Boomers as highly concerned with the wellbeing of loved ones; in particular their children. Thus, while self-transcendence was more highly valued overall by the Boomers than was self-enhancement, there were still strong aspects of self-enhancement evident in their values.

10.1.3 *Generation X*

Generation Xers have been portrayed in the media as highly experiential and open to change. They are viewed to be pragmatists who are not overly bound by convention or tradition. Generation Xers are also seen to be fiercely egalitarian and socially progressive, rather than self-interested. They are further depicted as hedonistic and pleasure-seeking rather than self-restraining. Given these characterizations, one might expect that Generation Xers would highly value the SVS value types related to openness to change – self-direction, stimulation and hedonism and would place less value on the conservation values of tradition, conformity and security. It is difficult to surmise a priori which of the

higher-order values of self-enhancement and self-transcendence would be more valued by Gen Xers as both have value elements that are often ascribed to Generation X. Specifically, one would expect Generation Xers to value universalism, but also hedonism, two values that are from opposing higher-order values.

The results indicate that Generation Xers do indeed value openness to change more than conservation. It is not surprising, given the characterizations in the literature, that self-direction and hedonism were both highly valued. It is also not surprising that tradition was rated as only moderately important by this generation. It is somewhat surprising, however, that the values conformity and security received moderately high importance ratings from Generation Xers. In particular, the literature consistently suggests that Gen Xers would place little, if any emphasis on the value conformity, which is measured by items related to obedience, honouring one's parents and elders, politeness and self-discipline.

10.1.4 The Echo Generation

The Echo generation (born in 1980 and later) is portrayed in the generational literature as a cohort that is highly adaptive to change, highly independent, fiercely egalitarian and very non-traditionalist. It might be expected, therefore, that like the Xers, the Echo would value openness to change over conservation values. It might also be argued that the individualism and materialism that the Echo is purported to display would reflect values of self-enhancement more than self-transcendence.

The results indicate that the Echo did value openness to change more than conservation, but the difference in the importance they placed on these two higher-order values was not as great as might be expected. Like the Generation Xers, the Echo placed a moderately high value on both conformity and security, which seems to run counter to the depiction of this generation in the literature. Also, they placed moderately high levels of importance on the higher-order values of self-enhancement and self-transcendence, with their mean score on self-transcendence only slightly higher than that for self-enhancement. The similarity in the overall mean scores for these two higher-level values suggests that the Echo are less divided in their values than are older generations, instead placing relatively equal value on both the interests of others and themselves.

10.2 *General Values Differences between Generational Cohorts*

While it is useful to examine the values exhibited by members of the various generations separately, it is necessary to compare the generations to determine if there are significant differences between their values scores. If statistically significant differences are not observed, then the concept of generation as operationalized in this thesis is called into question. The results of the analyses indicate that there are indeed significant generational differences in the set of ten general values proposed by Schwartz (1992, 1994). In all MANOVAs performed as part of the analyses, significant differences in general values were observed between the various generations, even when lifecycle and

gender variables were taken into account. This provides strong evidence of genuine generational value differences.

Significant generational differences were observed in nine of the ten general values types once the effect of gender is taken into consideration. The only value that was not given different levels of importance by the various generations is self-direction, which was valued highly by all generations. The high levels of importance that respondents placed on self-direction may reflect the fact that they were knowledge workers and university students – both occupations which require independence of thought and action.

The specific differences that were observed in each of the other nine values are discussed below, with reference to the four higher-order value types to which these values belong.

10.2.1 Openness to Change Values

As noted above, no significant generational differences were observed for the value self-direction, which is one of the values related to openness to change. The other two openness to change values (stimulation and hedonism) were valued more by the two younger generations than by the elder generations. Echo respondents valued hedonism significantly more than did all other generations, including Generation Xers. Although there was no significant difference between Echo and Generation X with respect to stimulation, these two generations both valued stimulation more than did the two older generations.

This finding is consistent with the popular depiction of the younger generations as more pleasure-seeking and hedonistic than the older generations.

It makes sense from a life-cycle perspective that younger individuals with fewer family commitments would be more open to gratification and experience than older individuals who have embraced these responsibilities. Thus, it was essential to establish that generational differences in the openness to change values were not merely an artifact of differences in lifecycle stage. When Boomers and Generation Xers were compared on these values with lifecycle taken into account, significant differences were found between the two generations on both values. Additionally, there were significant lifecycle differences for the value stimulation, suggesting that the value placed on excitement, novelty and challenge in one's life varies by lifecycle stage. However, since the interaction between lifecycle and generation was significant for this value, there was evidence that the lifecycle-related pattern in *stimulation* varies between generations. Closer examination of the results revealed a lifecycle-related pattern for the value stimulation for Generation Xers, but not for Baby Boomers. Specifically, Generation Xers who were single with no children valued stimulation more than those who were married with no children and those who had children. Also, those who were married with no children valued stimulation more than those with children. This indicates that stimulation appears to be valued less by Generation Xers with increasingly higher levels of family

responsibility. Since no similar life-cycle pattern was observed for Boomers, it appears that this lifecycle effect is itself a unique generational phenomenon.

10.2.2 *Conservation Values*

The conservation values – tradition, conformity and security – showed an interesting generational pattern. A similar pattern was discernable in the generational means for each of these variables. These values were less important to Generation Xers than to Echo respondents and to the two oldest generations. If these differences were significant, this would indicate a pattern of increasing value placed on conservation values by successively older generations, with the exception of the Echo, who would appear to demonstrate a resurgence of these values. However, while overall generational differences for each of the three conservation values were significant, the only significant pairwise differences detected in post hoc tests were between Generation Xers and Matures on the values conformity and security. Thus, it is not possible to make any inferences about the overall generational pattern related to the conservation values. The failure to detect significant inter-generational differences in the pairwise comparisons may be attributable to small sample sizes for some generational cohorts. Larger sample sizes should be sought for future analyses.

Furthermore, when Boomers and Generation Xers were compared with lifecycle effects taken into consideration, no significant differences were observed between the two generations on any of the three conservation values.

It is therefore likely that the overall generational differences that were detected are a reflection of the significant difference that was observed between Matures and Generation Xers on these values.

The finding that these conservation values do not follow a clear generational trend is interesting, as the literature generally depicts older generations, particularly the Matures, as more traditional and conformist than younger generations. It is also interesting to note that the mean scores for these two values were quite close for the Echo and Mature respondents. This lends some credence to the suggestion of some commentators (c.f. Adams, 1997) that the Echo generation is returning to traditionalist and conservative values similar to those of their grandparents, as discussed in chapter five.

10.2.3 Self-Enhancement Values

Significant generational differences were found for all three self-enhancement values (power, achievement and hedonism). The generational pattern for the value hedonism was discussed above, as it is also included in the openness to change values. Both power and achievement were valued less by the older generations than the younger. Though no significant differences were observed between Boomers and Matures, both Echo and Generation Xers valued power and achievement more than Boomers. Additionally, Echo respondents valued power significantly more than Generation Xers did. The overall pattern for these values indicates that the younger generations place more value on power and achievement than do the elder generations.

When Generation Xers and Boomers were compared, taking into account the effect of lifecycle, Generation Xers were found to value both power and achievement more than the Boomers did. A significant interaction between generation and lifecycle was observed for the value achievement. Closer investigation revealed different lifecycle patterns for Boomers and Xers. Boomers with children valued achievement significantly more than did single Boomers without children. The exact opposite was true for Generation Xers, for whom single individuals with no children valued achievement significantly more than did individuals with children. This finding may reflect the notion, expressed by some authors (e.g. Howe & Strauss, 1993), that Generation Xers are more willing than the Boomers to subjugate their ambitions in order to provide a stable home-life for their children. In any event, this finding lends credence to the notion of generational differences by showing that even when lifecycle effects were present they varied by generation, suggesting that lifecycle stages are experienced differently by members of different generations.

The popular characterization of Boomers as highly achievement-oriented would seem to suggest that they would value achievement more than other generations. If these characterizations are accurate, this emphasis on achievement would be particularly pronounced in comparison to the younger generations, who are often depicted as 'slackers' who are less focused on achievement. The results of this study suggest otherwise, however, as the

younger generations placed significantly more importance on achievement than did the older generations.

10.2.4 Self-Transcendence Values

Though all generations placed a high level of value on the self-transcendence values of benevolence and universalism, there were significant differences in the importance placed on these values by the various generations. The Echo generation placed significantly less importance on the value universalism than did all of the older generations. While there were no significant differences between the Boomers and Generation Xers or Boomers and Matures, there was a significant difference between Xers and Matures. The general pattern indicated by these findings is an increase in the value of universalism for older generations. This suggests that older generations place more value on tolerance and appreciation of others and the protection of the welfare of people in general, as well as the welfare of the natural environment. This is an interesting finding, as the generational literature generally depicts the younger generations as more socially conscious and tolerant of individual differences than the older generations. It should be noted, however, that the mean differences between generations on the value universalism are quite small, and that differences were not observed between all generational cohorts. Thus, while differences do exist, they are not pronounced.

While significant generational differences were observed on the whole for the value benevolence, pairwise comparisons between individual generational

cohorts revealed no significant differences. This again indicates a significant but small generational effect, suggesting that there is little practical difference between the generations with respect to the value they place on the wellbeing of those closest to them.

When the impact of lifecycle was considered, significant differences were observed between the Boomers and Generation Xers on the value universalism, but not benevolence. Although Boomers valued universalism significantly more than did Boomers, the difference in mean scores was quite small (0.16). Since no interaction between lifecycle and generation was observed for this value, it is not clear why a significant difference was found between Boomers and Xers only once lifecycle was considered. However, since the difference in mean scores was low, this finding lacks practical significance, even though it is statistically significant.

10.2.5 General Comments on Generational Differences in General Values

Looking at the inter-generational patterns across all ten value types provides a clearer picture of the ways in which the generations differ. Table 10.1 summarizes the various intergenerational differences. For each intergenerational pair (e.g. Boomers and Generation Xers), the table indicates which generation rated each of the ten general values higher, taking the effect of gender into account. The symbol 'NS' indicates inter-generational pairs for which no significant value differences were observed at the $p < .05$ level. As can be seen, the Echo generation and Generation X shared similar value sets overall, differing

on only three of the ten values. Power and hedonism were valued more by the Echo and Universalism was valued more by Generation Xers. In contrast, the Echo generation differed from the Boomer and Mature cohorts on five of the ten values. Power, hedonism, stimulation and achievement were all valued more by the Echo and universalism was valued more by the Boomers and Matures. Thus, while the Echo differed from all other generations, the inter-generational differences between this cohort and Generation Xers are smaller than were observed between the Echo and the Matures and Boomers. This would suggest that these two generations are more alike than unlike.

Perhaps the most interesting intergenerational comparison is that between the Boomers and Generation Xers. As Table 10.1 shows, Boomers and Xers differed on four of the ten general values. Power, hedonism, stimulation and achievement were all valued more by the Generation Xers. The value benevolence was also significantly more important to Boomers at the $p < .10$ level. Thus, it appears that the differences between Boomers and Xers are centred on the opposing higher-order values of self-enhancement and self-transcendence, with Generation Xers valuing self-enhancement (i.e. power, achievement and hedonism) more and Boomers valuing self-transcendence (i.e. universalism and benevolence) more.

Table 10.1 –Significant* Generational Differences in General Values

	Echo vs. Gen X	Echo vs. Boomers	Echo vs. Matures	Gen X vs. Boomers	Gen X vs. Matures	Boomers vs. Matures
Openness to Change						
Self-Direction	NS	NS	NS	NS	NS	NS
Stimulation	NS	Echo	Echo	Gen X	Gen X	NS
Hedonism	Echo	Echo	Echo	Gen X	Gen X	NS
Conservation						
Tradition	NS	NS	NS	NS	NS	NS
Conformity	NS	NS	NS	NS	Matures	NS
Security	NS	NS	NS	NS	Matures	NS
Self-Enhancement						
Power	Echo	Echo	Echo	Gen X	NS	NS
Achievement	NS	Echo	Echo	Gen X	NS	NS
Hedonism	Echo	Echo	Echo	Gen X	Gen X	NS
Self-Transcendence						
Universalism	Gen X	Boomers	Matures	NS	Matures	NS
Benevolence	NS	NS	NS	NS	NS	NS
*Differences are significant at the 0.05 level. The generation listed in a given cell is the one which rated the value significantly higher than the other. NS= not significant All comparisons were made with the effects of gender taken into account.						

Interestingly, Generation Xers differed from Matures on five of the ten values, but they were not the same values on which the Gen Xers and Boomers differed. Specifically, Generation Xers valued stimulation and hedonism more than did the Matures and the Matures valued conformity, security and universalism more than did the Generation Xers. Thus, the differences between Generation Xers and Matures centred on the opposing higher-order values of openness to change and conservation. This finding conforms well with the stereotypes of Matures as traditional and change-resistant and the Generation Xers as open to change and opposed to tradition.

Another interesting finding is that Matures and Boomers did not differ significantly on any of the ten values. This seems to support the supposition made by several authors (e.g. Smith & Clurman, 1997; Howe & Strauss, 1993), that the Matures represent a 'buffer generation' with values similar to those of the

Boomers. Because the Matures represented in this sample are the youngest of their generation, they may be considered to be 'cuspers,' to use Lancaster and Stillman's (2002) terminology. Since they are at the cusp of a generational divide, it would be unwise to assume that these respondents are representative of the Mature generation as a whole. Given this information, it may seem unnecessary to consider the Matures and Boomers as separate generational cohorts. Yet the unique pattern of values differences between the Matures and Generation Xers signifies that Matures may continue to have a bearing on the generational landscape of the workplace vis-à-vis their relationship with Xers. Since the Matures are the generation most likely to be parents to Generation Xers, it is little wonder that this generational relationship is unique.

The findings concerning the relationship between general values and lifecycle stage are notable. While lifecycle stage was significantly related to general values, its impact was secondary to that of generation in almost all analyses. For women, the relationship between general values and generation was significant even when the effect of lifecycle was taken into consideration. Generation also had a significant effect on values of all men except those with children, for whom no generational differences were evident. This suggests that generational differences in general values are genuinely attributable to the unique formative contexts of the various generations and are not merely an artifact of progression through the lifecycle.

10.3 Work Values of the Various Generational Cohorts

We now turn to an examination of the work values of the various generations with reference to the characterizations presented in chapter five. Each of the generations is discussed in turn in the sections that follow.

10.3.1 Matures

With respect to work values, the Matures are depicted in the generational literature as a cohort that is fiercely loyal, dependable and responsible. They are seen to defer to authority and are comfortable in subordinate positions. They are also purported to value status symbols as evidence of their dedication and achievement in their jobs. Given this characterization, one might expect that the Matures would value status-related work values, which include authority, prestigious work, influence and recognition for their efforts. Given their high value of self-transcendence described above, one might also expect that the Matures would value altruism-related work values such as work that supports their moral values and allows them to make a contribution to society.

Considering the 'no nonsense' approach they are purported to bring to their work, it also stands to reason that the Matures would place little value on the social environment of work.

The results of this study indicate that the Matures place the most value on work aspects related to altruism, such as work that is consistent with their moral values, work that allows them to contribute to society and a fair and impartial workplace. As noted above, these work values are consistent with the general

values of self-transcendence that were also highly valued by Matures. Extrinsic values such as salary, benefits and job security were also highly valued by the Matures, perhaps because these aspects of work are objective symbols of recognition for their service and dedication. Intrinsic work values were also highly valued by the matures, who, despite being close to retirement, still expressed the desire for work that is challenging, interesting, and fulfilling, providing them with a sense of accomplishment.

Contrary to the literature's characterization of Matures as status-seeking, the status-related values were valued the least by Matures. Such aspects as authority, prestige and travel were all rated fairly lowly by the Matures. The only status-related values to be highly valued by the Matures were recognition and influence. This may be reflective of the Matures' desire to 'leave their mark' as they head toward retirement.

10.3.2 *Baby Boomers*

As discussed in chapter five, the Boomers are generally depicted as hard-working to the point of 'workaholism' and are relentless in their pursuit of advancement and personal achievement. They are often portrayed as materialistic and status-seeking, but also seek meaning beyond the material aspects of work. It might therefore be expected that Boomers would value intrinsic work values such as interesting, intellectually stimulating and challenging work, as well as extrinsic values, which include salary and benefits. Since work-life balance has been an issue of particular concern to Boomers, they might also

be expected to value freedom in their work, including such aspects as accommodating hours of work and work-life balance.

The results indicate that Boomers placed the most value on extrinsic values, which conforms to the prior expectation stated above. While this may be a partial affirmation of Boomers' materialistic pursuits, compensation also stands as a symbol of achievement, which is a value often attributed to Boomers in the literature. The Boomers also placed a high degree of value on altruism-related values, which is in keeping with the high degree of importance they placed on the values of self-transcendence. As expected, intrinsic work values were also highly valued by the Boomers, indicating that they seek challenge, stimulation and fulfillment from their work.

Somewhat surprisingly, status-related values, which included such work aspects as authority, prestigious work, and influence were not highly valued by the Boomers. This suggests that the status-obsessed caricature of Boomers may be unfounded. It is also somewhat surprising given the amount of attention paid to Boomers' lack of work-life balance that they placed only moderate value on the freedom-related values, which included such items as hours of work and balance between work and non-work responsibilities. Perhaps, as Lancaster and Stillman (2002) have suggested, the Boomers are accepting of stress and view workoholism as a 'badge of honour' rather than as an undesirable aspect of work.

10.3.3 *Generation Xers*

As with the Boomers, the work-related values of Generation Xers have been the source of much anecdotal discussion in the generational literature. Gen Xers are generally portrayed as independent and self-reliant, with a strong distaste for hierarchy. This suggests that they would place much value on freedom-related work values. Gen Xers are also said to value opportunities to learn and to make use of their skills, and to value work that is varied, challenging and stimulating. This suggests that they would also place much value on intrinsic work values. Having faced a lack of opportunities throughout their early careers, one might also expect the Gen Xers to place value on extrinsic values, which include benefits and salary as well as job security. Finally, Generation Xers are often portrayed as the first generation to seek fun in workplace, suggesting that they would place value on the social environment at work.

The results partially confirm these stereotypes. Generation Xers placed the most value on extrinsic values, with benefits being one of their highest rated work values items. This might suggest that compensation provides Generation Xers with the legitimacy and financial stability they have craved throughout their early careers. As expected, intrinsic work values were also highly valued, and several of the items comprising this factor, such as challenging work, intellectually stimulating work fulfilling work, continuous learning and a sense of accomplishment were all highly valued. Like the Matures and Boomers, Generation Xers placed a high degree of value on altruism-related work values,

which included work that is consistent with one's moral values, making a contribution to society and working in a fair and equitable workplace. This is understandable given that they valued self-transcendence highly.

It is somewhat surprising, given the characterization of Generation Xers, that both freedom-related values and social work environment values received only moderately high value ratings by the Generation Xers. It is noteworthy, however, that two of the three freedom-related values – work-life balance and hours of work – were highly valued by Gen Xers.

10.3.4 The Echo Generation

While little is known about the work values of the Echo to date, the characterizations of the generational literature suggest that they are materialistic, achievement-oriented and seek constant change and opportunities for development. They are also purported to seek, even more than Gen Xers, a workplace that is fun and social.

The results of this thesis confirm this description of the Echo. Echo respondents placed the most value on extrinsic work values and on the social environment at work. Moderately high value was placed on freedom-related work values, intrinsic work values, altruism-related work values and status-related work values. It is interesting that the most highly valued work values item for the Echo was salary.

10.4 Generational Differences in Work Values

The results of this thesis show that there are inter-generational differences in the work values that were examined. Significant inter-generational differences were observed for three of the six work values factors (status-related work values, altruism-related work values and values related to the social environment at work) at the $p < .05$ level of significance and for intrinsic work values at the $p < .10$ level of significance. No significant differences were observed between the various generations for extrinsic work values or values related to freedom at work. The significant generational differences are examined in the following sections.

10.4.1 *Status-Related Work Values*

Significant inter-generational differences were observed for the factor containing status-related work values. Specifically, the Echo generation placed more value on this factor than did all of the other generations. Furthermore, Generation Xers valued status more than did Boomers. No significant difference was observed between Generation Xers and Matures or Boomers and Matures. Overall, the pattern suggested by these findings is that status-related work values, which include the items authority, prestigious work, influence on organizational outcomes, travel and recognition, are valued more by the younger generations than by the older generations. It is possible that status is valued less by knowledge workers from older generations because they have already attained it throughout their careers. Younger employees, on the other hand, may

place higher value on status-related work aspects, as they are seeking to establish legitimacy with their older colleagues. It has been suggested in the generational literature (c.f. Barnard et al., 1998) that the younger generations are more intent on establishing their legitimacy as contributors in the workplace than were older generations when they were at a similar point in their careers. If this is true, then the Echo and Generation Xers' focus on status is understandable.

A significant interaction between generation and lifecycle was observed when examining the differences between Boomers and Xers on status-related work values. Further investigation revealed that Generation Xers varied in the value they placed on status depending on their lifecycle stage, while Boomers did not. Specifically, married Gen Xers valued status-related work values more than did Generation Xers with children. A possible explanation for this finding is that Generation Xers are more likely than Boomers to shift their focus to their families as a source of gratification once they have children. Alternatively, it might be argued that Generation Xers who seek status choose to delay having children in order to pursue their careers. These interpretation do not, however, explain why Xers with children do not differ significantly from single Xers without children in the value they place on status. While this finding is somewhat ambiguous, it does show that the impact of lifecycle is different for Generation Xers than for Boomers, providing further evidence of the uniqueness of these two generations.

10.4.2 *Altruistic Work Values*

The Echo generation was found to value altruism in work significantly less than all of the older generations. Generation Xers also valued altruism significantly less than did both Boomers and Matures. There was no significant difference between Boomers and Matures. The general pattern suggested by these results is increasing value placed on altruism at work by subsequently older generations. When one considers that the same pattern was observed with respect to the general value-type *self-transcendence*, which is concerned with altruism in general, this finding is not surprising. This finding may reflect Erikson's developmental concept of generativity, whereby older individuals turn their attention to bettering the world for younger generations (c.f. Lemme, 1995). This, however, begs the question of why Matures did not value altruism significantly more than the Boomers did. Another possible explanation is that the older generations, having established their careers, may be in a better position to pursue work that is compatible with their morals rather than work that will advance their careers. Both of these explanations hinge on a life-cycle interpretation of work values differences. It is also possible that the stereotype of the younger generations as social activists seeking work that 'makes a difference' are incorrect.

10.4.3 *Social Work Environment Values*

Significant inter-generational differences were also observed with respect to the work values related to a social working environment. The results indicate

that the Echo generation valued a social work environment, characterized by fun and friendly co-workers, significantly more than did the Boomers and the Matures. There was no significant difference observed between Echo and Gen X respondents. Generation Xers also valued the social work environment significantly more than did Boomers, but not Matures. The overall pattern suggested by these findings is that the younger generations place more value on a social work environment than do the older generations, which is in keeping with the stereotypes presented in the generational literature.

10.4.4 Intrinsic Work Values

As noted above, significant generational differences were observed with respect to intrinsic work values, but only at the $p < .10$ level of significance. The only inter-generational difference that was observed for this work value was between Echo and Generation X respondents, with Generation Xers valuing intrinsic work values more than the Echo. Given the low confidence level of this finding and the fact that only one inter-generational difference was observed, this difference cannot be viewed as a major finding.

10.4.3 General Comments on Intergenerational Differences in Work Values

The significant generational differences in work values observed in this research are summarized in Table 10.2. As can be seen, the Echo generation differed from each of the other generations on three of the six work values. Generation Xers varied from Boomers on three of the six work values and from

Table 10.2 –Significant* Generational Differences in Work Values

	Echo vs. Gen X	Echo vs. Boomers	Echo vs. Matures	Gen X vs. Boomers***	Gen X vs. Matures	Boomers vs. Matures
Status-Related Work Values	Echo	Echo	Echo	Gen X	NS	NS
Altruism-Related Work Values	Gen X	Boomers	Matures	Boomers	Matures	NS
Social Environment at Work	Echo**	Echo	Echo	Gen X**	NS	NS
Intrinsic Work Values	Echo	NS	NS	NS	NS	NS

*Differences are significant at the 0.05 level

**Difference significant at the 0.10 level

***All differences are significant when gender is controlled, for Boomers and Gen Xers lifecycle was also controlled

the Matures on only one. As with general values, the Boomers and Matures were not significantly different on any of the work values. Overall, these findings reveal some inter-generational differences in work values, but not the degree of differences that are expressed in the generational literature.

It is interesting that no significant differences were observed with respect to extrinsic values and freedom at work. While the generational literature seems to suggest that there are differences in the value placed on salary and benefits between generations, this was not evident in the findings, with all generations valuing extrinsic work aspects highly. It is conceivable, however, given the depictions of the various generations in the literature, that each generation values extrinsic aspects such as pay and benefits for different reasons. For instance, money may symbolize achievement for the Boomers, freedom for Generation Xers and status for Echo respondents. Without qualitative analysis it is impossible to determine whether this is true or not.

It is also noteworthy that despite the literature's depiction of Generation Xers as highly independent and resistant to structure and long work hours, there

were no significant differences observed between them and other generations on the freedom-related work values, which included items pertaining to hours of work, work-life balance and working alone. Because all generations placed moderately high value on freedom, it is likely that the lack of significant differences are due to higher than expected ratings for this value by other generations. It is conceivable that the older generations, having worked in stressful environments for much of their careers, now seek balance and freedom in their work to the same degree as Generation Xers have throughout their careers.

10.5 Protestant Work Ethic Values of the Various Generational Cohorts

Identical patterns of adherence to the Protestant Work Ethic were observed for all four generations. Specifically, all four generations disagreed with the anti-leisure, asceticism and independence dimensions of the PWE and agreed slightly with the hard work ethic. It may seem somewhat surprising, given the characterizations of the generational literature that Generation Xers and Echo were opposed to the PWE dimension 'independence.' An examination of the three items in the PWE scale related to independence reveals that this dimension pertains to autonomy and self-reliance, rather than reliance on others to accomplish one's goals. This is somewhat different than the notion of independence of thought and action (i.e. being an 'individual') that is often attributed to the younger generations. In an age where teamwork is touted in both academic and work settings, it is not surprising that respondents of any

generation would not agree highly with statements such as 'to be superior a person must stand alone.'

It is somewhat surprising, however, that the Matures disagreed with the dimensions 'asceticism,' and 'anti-leisure,' which are often ascribed to them in the literature. This is, however, in keeping with the finding that the Matures were no more 'traditional' than the younger generations with respect to their general values. As noted earlier, the Matures included in this study were the youngest of their generation, and as such, may represent the 'cusp' between more traditional Matures and Boomers.

The four generations' support for the hard work dimension and the opposition of the three youngest generations to the anti-leisure are in keeping with the depictions of the generations in the literature.

10.6 Generational Differences in Protestant Work Ethic Values

Despite the popular conception of a declining work ethic in younger generations, previous research has generally found younger workers to be more strongly adherent to the values of the Protestant Work Ethic than are older workers. This would suggest that the younger generations' scores on the various PWE scales should be significantly higher than those of the older generations. This was not the case. Significant generational differences were observed with respect to the anti-leisure, asceticism and independence factors of the PWE ($p < .05$). There was, however, no significant difference in the hard word ethic. Post-hoc tests revealed that Generation Xers adhered to the anti-leisure ethic

significantly less than did all other generations. While this finding fits the characterization of Gen Xers as highly concerned with work-life balance and recreation time, it is not in keeping with the characterization of the Echo generation, who are generally seen to share the Xers' concern for a balanced life.

As might be expected, the Echo generation agreed with the asceticism dimension of the work ethic significantly less than did the other three generations. It is somewhat surprising, however, that there were no other intergenerational differences observed with respect to this dimension of the work ethic, particularly between Generation Xers and the older generations.

It was also found that the Echo generation agreed with the independence dimension of the work ethic significantly more than did Generation Xers. This finding is somewhat surprising, as both generations are portrayed in the literature as independent and entrepreneurial. It may be, however, that this tendency is stronger in the younger of the generations.

11 *Conclusions*

This final chapter presents the conclusions that have been drawn from the findings of this thesis. Limitations of the approach used in conducting this research are then discussed. Finally, possible directions for future research are outlined.

11.1 Conclusions

This research has investigated the phenomenon of generations through an examination of differences in general and work-related values. Generational differences were evident in every statistical test that was run, lending significant support to the existence of bona fide generational differences. The results lend empirical support to the depictions of the generations in the anecdotal generational literature, but show that these depictions are likely exaggerations of the actual differences. While significant differences were observed on nine of the ten general values types examined here, the generations appear to be as similar as they are different with respect to the values they bring to the world of work.

A secondary objective of this research was to examine the confluence of lifecycle and generational influences that may impact general and work values. Accordingly, an attempt was made to isolate the influence of adult development on values in order to ensure that observed differences are genuinely attributable to differing generational contexts rather than simply to adult development. The influence of gender on generational values findings was also taken into consideration in the analysis of values data. The results show that when gender

and lifecycle stage were held constant, significant generational differences were still evident, and in almost every case generation explained more of the variance than did these other demographic variables. In some instances interaction effects were detected between generation and either or both of gender and lifecycle. Further investigation revealed unique gender- and lifecycle-related findings for the various generations, while generation remained a significant explanatory variable across life-cycle stages and gender. This indicates that, at least for some values, the various generations exhibit different gender- and lifecycle-related values patterns. This provides further evidence of the unique nature of the various generations. The key conclusion evident from these findings is that neither gender nor lifecycle negated the significant relationship between generation and general values.

As one might expect, given the pervasive generational stereotypes, the younger generations appear to value openness to change and self-enhancement more than did the older generations. The opposite was true regarding the self-transcendence value of universalism, which was valued more by the older generations, indicating that they placed greater importance on altruism and justice in society as a whole than do the younger generations. There was no such pattern for the conservation values of conformity, tradition and security, which runs counter to the generational stereotypes.

In the workplace, the younger generations appear to value status-related work aspects and a social work environment more than do older generations.

The older generations tend to value altruistic work values, such as work that is consistent with one's moral values, work that makes a contribution to society and fairness in the workplace, more than do younger generations. These findings conform to the anecdotal evidence provided in popular press publications, which portrays younger workers as socially oriented at work and highly concerned with attaining legitimacy in a working world controlled by Baby Boomers (c.f. Barnard et al., 1998; Zemke et al., 2000; Lancaster and Stillman, 2002). However, since no significant differences were detected with respect to intrinsic work values, extrinsic work values and freedom-related work values, it appears that the generations are more similar than they are different on many of the key aspects of work.

It appears that the popular belief that the work ethic is disappearing with younger generations is largely unfounded. There were no significant generational differences in the value of hard work. It was found, however, that Generation Xers agreed with the anti-leisure component of the PWE significantly less than did other generations, including the Echo generation. It is not surprising, given the depictions of the generations that the Echo respondents were less in agreement with the work ethic dimension of asceticism than were older generations, though it is notable that they agreed with this dimension significantly less than did Generation Xers. It is somewhat surprising, however, that the Echo generation was more in agreement with the work ethic dimension of independence than were Generation Xers.

The concept of generations has a long tradition, but to date has garnered little empirical attention from researchers. Much work remains to be done to determine the precise nature of generation as a social category and a variable of interest to the social sciences. Key to the development of a clearer understanding of generations will be the role that values play in defining the 'content' of generational differences. This research is a useful first step in establishing the legitimacy of generation as a viable social categorization variable.

11.2 Contributions of this Research

This study represents, to the best of our knowledge, the first empirical investigation of the generational phenomenon through the study of general and work values. As an exploratory study, this research may serve as the starting point for a broader and more detailed exploration of generational differences that affect inter-generational relations both in and out of the workplace. This study has established the concept of generation as a viable and useful social grouping. Understanding that members of different generations hold unique sets of values allows us to view social interactions through a new perspective. As such, generation may prove an invaluable tool in interpreting and predicting the attitudes and behaviours of individuals. In short, as Lancaster and Stillman (2002) assert, generation may be viewed as a useful new form of diversity.

In addition to its contribution to the study of generations, this research has made a unique contribution to the study of general and work values. First, this

thesis proposed a new theoretical relationship between general and work values based on the relative levels of abstractness of the concepts. Second, this research has lent support to Schwartz's (1992) model of general values by replicating the theorized factor structure for the set of values. Support was also provided for the factor structure of Blau and Ryan's (1997) measure of the Protestant work ethic. Finally, this thesis proposed a new measure of work values that incorporated items from previous measures and added two new items. This measure is unique in capturing the full dimensionality of the values construct by incorporating value content, intensity and relative importance.

11.3 Limitations of this Research

This study represents an exploratory investigation of the intersection of a number of broad topics, including generations, life cycle, values, work values, the work ethic, and the meaning of working. Giving all of these topics the full attention they deserve is well beyond the scope of any single study. These topics were explored here in hopes of identifying research priorities to guide subsequent efforts. Given this objective, a number of limitations become immediately evident in the present study that will need to be addressed more fully in future research.

First, like prior research on generational values (c.f. Adams, 1998; Burke, 1994a), the present research specified generations *a priori* and then sought to determine values attributable to those generations. Such an approach begs the question of whether the generations are accurately specified. The generational

typology employed in the present research was operationalized through a review of practitioner literature that has never before been empirically tested. To determine whether the generations are accurately specified, an inductive approach is necessary, whereby individuals are aggregated *a posteriori* based on the similarity of their general and work values response patterns. If the individuals sharing similar values are close in age, then it can be said that a generational effect is evident. If no clear age-related patterns emerge, then the notion of generation is called into question. At the same time, such an approach would be instructive in refining the precise boundaries of the various generations.

Such an approach was not utilized in the present research, as it was the intention of this research to examine the validity of the depictions of generations provided in the popular press literature. Employing such an inductive method in the present research would have created methodological problems, as defining generational membership on the basis of values and then using the resultant generational categories to explain the variance in values responses would be a tautology. Separate research is needed to validate the generational categories that have been proposed in this research. The use of cluster analysis and/or discriminant function analysis would be useful in determining if there are clear generational patterns in values responses, and if so, whether those generational patterns correspond to the generations specified in this research.

A second limitation of the present research stems from the restricted sample size that was used. While the overall sample for the study was

sufficiently large, the number of respondents in the Echo and Mature cohorts was somewhat small. Sample size limitations in this study were the product of practical concerns, including time and funding limitations. The result of a smaller sample size, given the number of variables considered in this study, was reduced statistical power for many of the tests of significance. The implication of this increased risk of Type-II error is that some significant differences may have been overlooked. This is particularly true with respect to the small Mature cohort, for which few significant general or work values differences were observed. A larger sample for this quantitative study would increase the statistical power of inferences (Stevens, 1992) and would increase the possibility of finding sufficient numbers of respondents for all combinations of variables of interest.

The generalizability of the results reported here are further limited by the reliance on undergraduate business students to constitute the Echo sample. As the Echo generation continues to enter the workforce it will be possible for subsequent research to sample them as employees. This will make comparisons across generations more viable, by eliminating a source of potential systemic bias. Bias may also have been introduced with the use of Duxbury and Higgins' (2001) respondent list. Since these self-selected respondents were pre-disposed to participate, a response bias may have been introduced. Future research should endeavour to verify the results of this study with a stratified random sample of respondents.

Generalizability is also limited by the select nature of the sample considered here. Since this study concerned only knowledge workers in Canada, one must be cautious in extrapolating these findings to other contexts. Future research should expand the sample to include blue-collar and part-time workers, who are likely to have had markedly different developmental experiences than the white collar sample of this study. This research also bears replication in other countries that have experienced demographic patterns similar to those of Canada. Specifically, research in the US, the UK, Australia and New Zealand would shed additional light on this phenomenon, and would allow for the influence of national culture to be investigated.

A further limitation of this research relates to the lack of theoretical evidence linking the concepts of generation and values. This thesis was predicated on the assumption that any perceived differences between generational cohorts must be reflected in some way to differences in values. The theory underlying this assumption states that values, as a core psychological construct, are antecedent to attitudes and behaviour. Therefore, any attitudinal or behavioural differences between generations that are observed by commentators should be rooted to some degree in values differences. However, as discussed in chapter two, the relationship between values, attitudes and behaviour is believed to be indirect. It may be that there are other psychological and social variables that provide better a explanation of perceived generational differences. More theoretical work needs to be done to determine the specific

'content' of generational differences in both psychological and sociological terms, and to determine the role of values in the generational concept.

Another issue that merits attention is centred on the confluence of generational and life-cycle effects. As noted previously in this thesis, the respective roles of generation and life cycle on values must be addressed simultaneously in order to determine whether observed values differences are attributable to the processes of adult development rather than social change. The role of adult development has been addressed in this thesis through an examination of developmental tasks, which were considered to be an imperfect proxy for developmental progress. The cross-sectional nature of this research limited the types of conclusions that could be drawn. As has been noted repeatedly throughout this thesis, it is impossible to ascertain whether any observed differences between generations at a single moment in history is attributable to life-cycle stage differences or to genuine generational differences. It is a unique challenge to attempt to control for life-cycle variables in a generational analysis, as different generations are necessarily at different life cycle stages at any single point in time.

Ideally, values research must be undertaken longitudinally in order to track values change as it occurs throughout the life cycle. Future research should focus on changes in values across the human life cycle, tracking individual respondents' values longitudinally. If different life-cycle patterns emerge across generational cohorts, then the notion of generational differences will be given

credence. Qualitative research that asks respondents to discuss changes in their values over their lifetimes retrospectively is another option (similar to the type of work undertaken by Levinson (1978) as discussed in chapter four), though the potential drawbacks of retrospect are obvious.

A final limitation of this research relates to the interpretation of the factor structure that emerged for the 31 vocational work values items. While an attempt was made to accurately capture the essence of each factor, it is difficult to precisely determine the unifying relationships between the various items loading on each factor without additional qualitative data. Because work values are somewhat more tangible than general values, the value structure of the work values plays a critical role in determining the underlying values concepts that tie the various items together. As such, it is important that the overarching factors be clearly understood. Qualitative data collection and analysis are needed to genuinely understand the psychological constructs that unite these sets of work value items. Through such analysis it may be found that different generations value the same items for different reasons. For instance, one generation may value salary as a symbol of status and achievement, while another values salary as a means to the end of freedom. Only qualitative data can reveal these differences.

11.3 Directions for Future Research

There are a number of research pursuits that are evident in light of this study's findings. As noted above, qualitative research is needed to provide a

fuller depiction of the values profiles of the various generations, both in life in general and in work. Qualitative research would also serve to clarify the complex relationships that were examined between generational and lifecycle influences on values. A fuller appreciation of the evolving lifecycles of the various generations is needed in order to better interpret values differences.

Also, as noted above, inductive analysis of values data would be helpful to identify groups of individuals with homogenous value sets. If the sample is broadened to incorporate a wider variety of working individuals, it may become evident that there are other grouping variables that explain value differences better than do generation. It would be highly instructive to determine whether generational categories would emerge as differentiating factors through an inductive approach.

As noted in chapter four, generations are theorized to be agglomerations of generational subunits rather than homogeneous social cohorts. For the purposes of this exploratory investigation, generations were treated as fairly homogeneous groups. Now that generational differences have been observed it would be useful to investigate the various subgroups that comprise each generation. Adams (1997) has provided some evidence in this direction, but further empirical research is needed to clearly define the intra-generational value patterns that exist.

Finally, having established differences in the general and work values of various generations, it would now be useful to identify more practical applications

of these findings to the workplace. Since values are fairly intangible, they are difficult to apply concretely to workplace functions such as recruitment, hiring and retention. Work therefore remains to be done to make generation a concept that is applicable in practice. For instance, it would be useful to determine whether the values of various generations are more or less conducive to key workplace variables such as job satisfaction, organizational commitment and job involvement and to outcomes such as job performance and employee turnover. Generation has been shown here to be a pertinent basis for classification of similar individuals in the workplace. Knowing what it is that the various generations value is a useful first step, but the application of this knowledge to managerial practices will be the greater challenge.

References

- Abu-Saad, I., & Isralowitz, R. E. (1997). "Gender as a Determinant of Work Values Among University Students in Isreal," in *Journal of Social Psychology*, 137: pp. 749-763.
- Adams, M. (1998). *Sex in the Snow: Canadian Social Values at the End of the Millennium*, Toronto: Penguin Books.
- Aldag, R. J. & Brief, A. P. (1975). "Some Correlates of Work Values," in *Journal of Applied Psychology*, 60: pp. 757-760.
- Alderfer, C. (1972). *Existence, Relatedness and Growth*. New York: Free Press.
- Alpers, S. W. (1975). "Racial Differences in Job and Work Environment Priorities Among Newly Hired College Graduates," in *Journal of Applied Psychology*, 60, pp. 132-134
- Allport, G. W., Vernon, P. E., and Lindzey, G. A. (1960). *A Study of Human Values*. Original Publication [Allport and Vernon]: 1931. Third Edition, Boston: Houghton Mifflin.
- Baguma, P. and Furnham, A. (1993). "The Protestant Work Ethic in Great Britain and Uganda," in *Journal of Cross-Cultural Psychology*, 24: pp. 495-507.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Barnard, R., Cosgrave, D. and Welsh, J. (1998). *Chips and Pop: Decoding the Nexus Generation*, Toronto: Malcolm Lester Books.
- Beit-Hallahmi, B. (1979). "Personal and Social Components of the Protestant Ethic," in *Journal of Social Psychology*, 109: pp. 263-267.
- Bernstein, P. (1997). *American Work Values: Their Origin and Development*. New York: State University of New York Press.
- Beutel A.M. and Marini, M. M. (1995). "Gender and Values" in *American Sociological Review*. 60 (3) pp. 436-448.
- Billings, R. S. & Cornelius, E. T. (1980). "Dimensions of Work Outcomes: A Multidimensional Scaling Approach," in *Personnel Psychology*, 33: pp. 151-162.

- Bilsky W. and Schwartz S. H. (1994). "Values and Personality," in *European Journal of Personality*. 8(3): pp. 163-181.
- Blau, G., (1989). Testing the Generalizability of a Career Commitment Measure and Its Impact on Employee Turnover, *Journal of Vocational Behavior*. 35: 88-103.
- Blau, G., & Ryan, J. (1997). "On Measuring Work Ethic: A Neglected Work Commitment Facet," in *Journal of Vocational Behaviour*, 51: pp. 435-448.
- Blickle, G. (2000). "Do Work Values Predict the Use of Intraorganizational Influence Strategies?," in *Journal of Applied Social Psychology*, 30: pp. 196-205.
- Blood, M. (1968). Relationships among worker's backgrounds, attitudes, behaviors, and value systems. Unpublished doctoral dissertation, University of Illinois. Cited in Blood (1969).
- Blood, M. (1969). Work values and job satisfaction. *Journal of Applied Psychology*, 33, pp.456-459.
- Boudrieu, P. (1990) *The Logic of Practice*. Cambridge: Polity Press. Cited in Eyerman and Turner (1998)
- Braithwaite, V A. & Law, H. G. (1985). "Structure of Human Values: Testing the Adequacy of the Rokeach Value Survey," in *Journal of Personality and Social Psychology*, 49: pp. 250-263.
- Bretz, R. D. and Judge, T. A. (1994). "Person-Organization Fit and the Theory of Work Adjustment - Implications for Satisfaction, Tenure, and Career Success," in *Journal of Vocational Behaviour*, 44: pp. 33-54.
- Buchholz, R. A. (1978). "An empirical study of contemporary beliefs about Work in American Society.," in *Journal of Applied Psychology*, 63: pp. 219-227.
- Burke, R. J. (1994a). "Generation X: Measures, Sex and Age Differences," in *Psychological Reports*, 74: pp. 555-562.
- _____ (1994b). "Career and Life Values and Expectations of University Business Students," in *Psychological Reports*, 75: pp. 147-160.
- Cherrington, D. J., Condie, S. J., & England, J. L. (1979). "Age and Work Values," in *Academy of Management Journal*, 22: pp. 617-623.

- Conger, J. A. (2000). "How 'Gen X' Managers Manage," in Osland, J. S., Kolb, D. A. and Rubin, I. M. (Eds.) *The Organizational Behavior Reader*. New Jersey: Prentice Hall.
- Cooper, D. S. (1990). "What 25-Year Olds Want," in *Fortune*. August 27, pp. 42-50
- Cooper, D. S., and P. S. Schindler (1995). *Business Research Methods, Sixth Edition*, Toronto: Irwin McGraw-Hill.
- Coupland, D. (1991). *Generation X: Tales from an Accelerated Culture*. New York: St. Martins.
- Dagenais, F. (1998). "Super's Work Values Inventory Scales as Intrinsic of Extrinsic Constructs," in *Psychological Reports*, 83: pp. 197-198.
- Dawis, R. V. (1991). "Vocational Interests, Values, and Preferences," in *Handbook of Industrial and Organizational Psychology*, 2: pp. 833-871.
- Dawis, R. V., G. W. England and Lofquist, L. H. (1964). *A Theory of Work Adjustment*. Minnesota Studies in Vocational Rehabilitation, Minneapolis: University of Minnesota Press.
- Dawis, R. V. and Lofquist, L. H. (1984). *A Psychological Theory of Work Adjustment*. Minneapolis: University of Minnesota Press.
- Dickson, J. and Buchholz, R. (1977) "Differences in Beliefs About Work Between Managers and Blue-Collar Workers," *Journal of Management Studies*, 14, pp. 80-101.
- Didio L. Saragovi C. Koestner R. and Aube J. (1996). Linking Personal Values to Gender" in *Sex Roles*. 34 pp. 621-636, May.
- Dose, J. J. (1997). "Work Values - An Integrative Framework and Illustrative Application to Organizational Socialization," in *Journal of Occupational and Organizational Psychology*, 70: pp. 219-240.
- Drucker, P. E. (1992). "The New Society of Organizations," in *Harvard Business Review*, September-October, pp. 95-104.
- Duxbury, L. and Higgins, C. (2001). *Work-Life Balance in the New Millennium: Where Are We? Where Do We Need to Go?* Ottawa: CPRN Discussion Paper. Canadian Policy Research Network.

- Elizur, D. (1984). "Facets of Work Values: A Structural Analysis of Work Outcomes," in *Journal of Applied Psychology*, 69: pp. 379-389.
- _____ (1994). "Gender and Work Values: A Comparative Analysis," in *Journal of Social Psychology*, 134: pp. 201-212.
- _____ (1996). "Work Values and Commitment," in *International Journal of Manpower*, 17: pp. 25-30.
- Elizur, D. & Sagie, A. (1996). "The Structure Of Personal Values - A Conical Representation of Multiple Life Areas," in *Journal of Organizational Behaviour*, 17: pp. 573-586.
- _____. (1999). "Facets of personal values: A structural analysis of life and work values," in *Applied Psychology - An International Review*, 48: pp. 73-87.
- England, G. W. (1967) "Personal Value Systems of American Managers," in *Academy of Management Journal*, 10, pp. 53-68.
- England, G. W., Ruiz Quintanilla, S. A., and Maimer, J. (1995). *Meaning of Working Survey C*.
- Erez, M. and Earley, P. C. (1993). *Culture, Self-Identity and Work*, New York: Oxford.
- Eyerman, R. and Turner, B. S. (1998). "Outline of a Theory of Generations," in *European Journal of Social Theory*, 1(1): pp. 91-106.
- Ewen, R. B. (1993). *An Introduction to Theories of Personality, 4th Edition*, Hillsdale: Lawrence Erlbaum Associates, Publications.
- Fallding, H. (1965). "A Proposal for the Empirical Study of Values," in *American Sociological Review*, 30: pp. 223-233.
- Feldman, D. C. (1987). "Career Stages and Life Stages: A Career-Development Perspective," in *The 1987 Annual Developing Human Resources*. LaJolla, CA: University Associates.
- Foot, D. K. (1998). *Boom, Bust and Echo 2000: Profiting From the Demographic Shift in the New Millennium*. Toronto:MacFarlane, Walter and Ross.

- Furnham, A. (1984). "The Protestant Work Ethic: A Review of the Psychological Literature.," in *European journal of Social Psychology*, 14: pp. 87-104.
- _____ (1987). "Work Related Beliefs and Human Values," in *Personality and Individual Differences*, 8: pp. 627-637.
- _____ (1990). "A Current, Correlational, and Factor Analytical Study of Seven Questionnaire Measures of the Protestant Work Ethic," in *Human Relations*, 43: pp. 383-399.
- Furnham, A., Masters, J., Bond, M., Payne, M., Heaven, P., Rajanikam, R., Hilton, D., Stacey, B., Lobel, T., & Van Daalen, H. (1993). "A Comparison of the Protestant Work Ethic Beliefs in Thirteen Nations," in *Journal of Social Psychology*, 133: pp. 185-197.
- Gay, E. G., Weiss, D. J., Hendel, D. D., Dawis, R. V. and Lofquist, L. H. (1971). *Manual for the Minnesota Importance Questionnaire*. Industrial Relations Center, University of Minnesota.
- George, L. K. (1996). "Missing Links: The Case for a Social Psychology of the Life Course," in *The Gerontologist*, 36 pp. 248-255.
- George, J. M., & Jones, G. R. (1997). "Experiencing Work: Values, Attitudes, and Moods," in *Human Relations*, 50: pp. 393-416.
- Gibbins, K., & Walker, I. (1993). "Multiple Interpretations of the Rokeach Value Survey," in *Journal of Social Psychology*, 133: pp. 797-805.
- Guttman, L. (1968). "A General Nonmetric Technique for Finding the Smallest Coordinate Space for a Configuration of Points," in *Psychometrika*, 33 pp. 469-506.
- Harding, S. D., & Hiksloops, F. J. (1995). "New Work Values: In Theory and in Practice," in *International Social Science Journal*, 47: pp. 44-45.
- Harrington, T. F. and O'Shea, A. J. (1993). *Manual for the Harrington-O'Shea System for Career Decision-Making*. Toronto: Pyscan Corporation.
- Havighurst, R. (1953). *Human Development and Education*. New York: Longmans, Green.
- Hendrix, V. L., and D. E. Super (1968). "Factor Dimension and Reliability of the Work Values Inventory," in *Vocational Guidance Quarterly*, 17: pp. 269-274.

- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The Motivation to Work* (2nd ed.). New York: John Wiley & Sons.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills: Sage Publications.
- Hovekamp, T. M. (1994). "Work Values Among Professional Employees in Union and Nonunion Research Library Institutions," in *Journal of Applied Social Psychology*, 24: pp. 981-993.
- Howe, N. and Strauss, B. (1993). *13th Gen: Abort, Rety, Ignore, Fail*. New York: Vintage Books.
- Izzo, J. B. and Withers, P. (2000). *Values Shift: The New Work Ethic and What it Means for Business*, Toronto: Prentice Hall
- Jones, H. B. (1997). "The Protestant Work Ethic: Weber's Model and the Empirical Literature," in *Human Relations*, 50: pp. 757-778.
- Judge, T. A., & Bretz, R. D. Jr. (1992). "Effects of Work Values on Job Choice Decisions," in *Journal of Applied Psychology*, 77: pp. 261-271.
- Jurgensen, C. E. (1978). "Job Preferences (What makes a job good or bad?)," in *Journal of Applied Psychology*, 50: pp. 479-487.
- Jurkiewicz, C. L. (2000). "Generation X and the Public Employee," in *Public Personnel Management*, 29, pp. 55-73.
- Karp, H. B. & Sirias, D (2001). "Generational Conflict: A New Paradigm for Teams of the 21st Century," in *Gestalt Review*, 5, No. 2, pp. 71-87.
- Keller, L. M., Bouchard, T. J. Jr., Arvey, R. D., Segal, N. L. & Dawis, R. V. (1992). "Work Values: Genetic and Environmental Influences," in *Journal of Applied Psychology*, 77: pp. 79-88.
- Kidron, A. G., (1978). Work Values and Organizational Commitment, *Academy of Management Journal*. 21: 239-247.
- Kim, J., & Mueller, C. (1978). *Factor analysis: Statistical methods and practical issues* (Sage University paper series on quantitative applications in the social sciences). Beverly Hills, CA: Sage Publications.

- Kluckhohn, C. (1951). "Values and Value-Orientations in the Theory of Action: An Exploration in Definition and Classification," in *Toward a General Theory of Action*, T. Parsons and E. A. Shils (eds.), Cambridge: Harvard University Press.
- Knoop, R. (1994). "Work Values and Job Satisfaction," in *Journal of Psychology*, 128: pp. 683-690.
- Krau, E. (1987). "The Crystallization of Work Values in Adolescence: A Sociocultural Approach," in *Journal of Vocational Behaviour*, 30: pp. 103-123.
- Kristiansen, C. M. and Hotte A. (1996). "Morality and the Self: Implications for the When and How of Value-Attitude-Behavior Relations," in Seligman C., Olson, J.M. and Zanna, M.P. Eds. *The Psychology of Values: The Ontario Symposium Volume 8*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Lakritz, N. (2003). "You're too Precious to Fail," in *Calgary Herald*, April 22.
- Lancaster, L. C. and Stillman, D. (2002). *When Generations Collide: Who They Are. Why They Clash. How to Solve the Generational Puzzle at Work*. New York: Harper Collins.
- Laufer, R. S. and Bengston, V. L. (1974). "Generations, Aging and Social Stratification: On the Development of Generational Units," in *Journal of Social Issues*, 30, pp. 181-205.
- Lebo, R. B., Harrington, T. F. and Tillman, R. (1995). "Work Values Similarities Among Students From Six Countries," in *Career Development Quarterly*, 43, pp. 350-362.
- Lemme, B. H. (1995). *Development in Adulthood*, Boston: Allyn and Bacon.
- Levinson, D. (1978). *The Seasons of a Man's Life* New York: Alfred A. Knopf.
- _____ (1996). *The Seasons of a Woman's Life*. New York: Alfred A. Knopf.
- Lewis, M. (2001). *Next: The Future Just Happened*. New York: W. W. Norton and Company.

- Liedtka, J. M. (1989). "Value Congruence: The Interplay of Individual and Organizational Value Systems," in *Journal of Business Ethics*, 8, pp. 805-815.
- Locke, E. A. (1968). "Toward a theory of task motivation and incentives." *Organizational Behavior and Human Performance*, 3, 157-189.
- _____ (1976). "The nature and causes of job satisfaction." In M.C. Dunnette, editor, *Handbook of industrial and organizational psychology*, 1297-1349.
- _____ (1991). "The Motivation Sequence, the Motivation Hub, and the Motivation Core," in *Organizational Behavior and Human Decision Processes*, 50: pp. 288-299.
- Losyk, B. (1997). "Generation X: What They Think and What They Plan to Do," in *Futurist* March-April. pp. 39-44.
- Maccoby, M. (1988). *Why Work: Leading the New Generation*. New York: Simon and Schuster.
- MacNab, D., & Fitzsimmons, G. W. (1987). "A Multi-trait-Multimethod Study of Work-Related Needs, Values, and Preferences," in *Journal of Vocational Behaviour*, 30: pp. 1-15.
- Mandler, G. (1993), "Approaches to a Psychology of Value", in *The Origin of Values*, Ed. Hechter, Nadel and Michod (Aldine de Gruyter).
- Manhardt, P. J. (1972). "Job Orientation of Male and Female College Graduates in Business," in *Personnel Psychology*, 23, pp. 361-368
- Mannheim, K. (1952). *Essays on the Sociology of Knowledge*. London: Routledge & Kegan Paul Ltd.
- Maslow, A. (1943). "A Theory of Human Motivation," in *Psychological Review*, 50, 370-396.
- Mason, E. S. (1994). "Work Values: A Gender Comparison and Implications for Practice," in *Psychological Reports*, 74: pp. 415-418.
- McClelland, D. C. (1966) "That Urge to Achieve," in *Think* magazine, published by IBM Corp. [Reprinted in *Classics of Organization Theory*, 3rd Edition. Shafritz, J. M. and Ott, J. S. (Eds.) California: Wadsworth, 1992. pp. 181-187.

- Mead, M. (1978). *Culture and Commitment: The New Relationships Between the Generations in the 1970s*. New York: Columbia University Press.
- Meglino B. M. (2000). *Use of the Comparative Emphasis Scale*, On-line resource on Bruce Meglino's personal website. URL: <http://darlamoore.badm.sc.edu/faculty/vita/comparuse.htm>
Accessed April 10, 2001
- Meglino, B. M., & Ravlin, E. C. (1998). "Individual Values in Organizations: Concepts, Controversies, and Research," in *Journal of Management*, 24: pp. 351-389.
- Meglino, B. M., Ravlin, E. C. & Adkins, C. L. (1989). "A Work Values Approach to Corporate Culture: A Field Test of the Value Congruence Process and its Relationship to Individual Outcomes," in *Journal of Applied Psychology*, 74: pp. 424-432.
- Miller, M. F. (1974). "Relationship of Vocational Maturity to Work Values," in *Journal of Vocational Behaviour*, 5: pp. 367-371.
- Mirels, H. & Garrett, J. (1971). "Protestant Ethic as a Personality Variable," in *Journal of Consulting and Clinical Psychology*, 36: pp. 40-44.
- MOW International Research Team (1987). *The Meaning of Working*. London: Academic Press.
- MOW Centre Official Web Site
URL: <http://allserv.rug.ac.be/~rclaes/MOW/index.html>
Accessed: July 1, 2001
- Mudrack, P. E. (1997). "Protestant Work-Ethic Dimensions and Work Orientations," in *Personality and Individual Differences*, 23: pp. 217-225.
- _____ (1999). "Time structure and purpose, Type A behavior, and the Protestant work ethic," in *Journal of Organizational Behaviour*, 20: pp. 145-158.
- Muchnick, M. (1996). *Naked Management: Bare Essentials for Motivating the X-Generation at Work*. Delray Beach, FL: St. Lucie Press.
- Munk, N. (1998). "Organization Man," in *Fortune*, March 16. pp 63-82.

- Nord, W. R., Brief, A. P., Atieh, J. M. & Doherty, E. M. (1988). "Work Values and the Conduct of Organizational Behavior," in *Research in Organizational Behavior*, 10: pp. 1-42.
- _____ (1990). "Studying Meaning of Work: The Case of Work Values," in Brief, A. P. and Nord, W. R. (Eds.) *Meanings of Occupational Work*, Lexington, MA, USA: Lexington Books.
- O'Connor, J. P., and J. F. Kinnane (1961). "A Factor Analysis of Work Values," in *Journal of Counselling Psychology*, 9: pp. 263-267.
- Pennings, I. M. (1970). "Work Value Systems of White Collar Workers," in *Administrative Science Quarterly*, 15: pp. 397-405.
- Pilcher, J. (1994). "Mannheim's Sociology of Generations: An Undervalued Legacy," in *British Journal of Sociology*, 45, pp.481-495.
- Pryor, R. G. L. (1979). "In search of a Concept: Work Values," in *The Vocational Guidance Quarterly*, 27, pp. 250-258.
- _____ (1981). Interests and Values as Preferences: A Validation of the Work Aspects Preference Scale," in *Australian Psychologist*, 16, pp. 258-272.
- Ravlin, E. C. & Meglino, B. M. (1987). "Effects of Values on Perception and Decision Making: A Study of Alternative Work Values Measures," in *Journal of Applied Psychology*, 72: pp. 666-673.
- _____ (1989). "The Transitivity of Work Values: Hierarchical Preference Ordering of Socially Desirable Stimuli," in *Organizational Behavior and Human Decision Processes*, 44: pp. 494-508.
- Roe, R.A. and Ester, P. (1999). "Values and Work: Empirical Findings and Theoretical Perspective," in *Applied Psychology - An International Review*, 48: pp. 1-21.
- Rokeach, M. (1972). *Beliefs, Attitudes and Values*. San Francisco: Jossey-Bass. Original Published in 1968.
- Rokeach, M. (1973). *The Nature of Human Values*. New York: The Free Press.
- Rokeach, M. (1979). "From Individual to Institutional Values: With Special Reference to the Values of Science," in *Understanding Human Values: Individual and Societal*, M. Rokeach (Ed.). New York: The Free Press.

- Ronen, S. (1978). "Personal Values: A Basis for Work Motivational Set and Work Attitude," in *Organizational Behavior and Human Performance*, 21: pp. 80-107.
- Ros, M. Schwartz, S. H. & Surkiss, S. (1999). "Basic individual values, work values, and the meaning of work," in *Applied Psychology - An International Review*, 48: pp. 49-71.
- Rosenberg, M. (1957). *Occupations and Values*. Glencoe: The Free Press.
- Rosow (1978). "What is a Cohort and Why?," in *Human development*, 21, pp. 65-75. Cited in Pilcher (1994).
- Rounds, J. B., Henly, G. A., Dawis, R. V., Lofquist and D. J. Weiss (1981) *Manual for the Minnesota Importance Questionnaire*. Minneapolis: University of Minnesota Press.
- Rowe, R. and Snizek, W.E. (1995). "Gender Differences in Work Values - Perpetuating the Myth" in *Work & Occupations*. 22(2) pp. 215-229.
- Ryder, N. B. (1965). "The Cohort Concept in the Study of Social Change," in *American Sociological Review*, 30, pp. 843-861.
- Sagie, A., Elizur, D. & Koslowsky, M. (1996). "Work Values: A Theoretical Overview and a Model of their Effects," in *Journal of Organizational Behaviour*, 17: pp. 503-514.
- Saks, A. M., Mudrack, P. E., & Ashforth, B. E. (1996). "The Relationship Between the Work Ethic, Job Attitudes, Intentions to Quit and Turnover for Temporary Service Employees," in *Canadian Journal of Administrative Sciences*, 13: pp. 226-236.
- Schein, E. (1985). *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Schwartz, S. H. (1992). "Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries," in *Advances in Experimental Social Psychology*, 25, pp. 1-65.
- _____ (1994). "Are there Universal Aspects in the Structure and Contents of Human Values?," in *Journal of Social Issues*, 50, No. 4, pp. 19-45.

- _____ (1996). "Value Priorities and Behavior: Applying a Theory of Integrated Values Systems,' in Seligman C., Olson, J.M. and Zanna, M.P. Eds. *The Psychology of Values: The Ontario Symposium Volume 8*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- _____ (1999). "A Theory of Cultural Values and Some Implications for Work," in *Applied Psychology - An International Review*, 48: pp. 23-47.
- Schwartz, S. H. & Bilsky, W. (1987). "Toward a Universal Psychological Structure of Human Values," in *Journal of Personality and Social Psychology*, 53: pp. 550-562.
- Schwartz, S. H. & L. Sagiv. (1995). "Identifying Culture-Specifics in the Content and Structure of Values," in *Journal of Cross-Cultural Psychology*, 26, pp. 92-116.
- Schwartz, S. H., Verkasalo, M., Antonovsky, A., & Sagiv, L. (1997). "Social desirability and Value Priorities: Much Substance, Some Style." In *British Journal of Social Psychology*, 36, 3-18.
- Schwarzweiler, H. L. (1960). "Values and Occupational Choice," in *Social Forces*, 39?: pp. 126-135.
- Scott, J (2000). "Is it a Different World to When You were Growing Up? Generational Effects on Social Representations and Child-Rearing Values," in *British Journal of Sociology*, 51, pp. 355-376.
- Simpson, R. L. and Simpson, I. H.(1960). "Values, Personal Influence, and Occupational Choice," in *Social Forces*, 39, pp. 116-125.
- Smith, J. W. and Clurman, A. (1997). *Rocking the Ages: The Yankelovich Report on Generational Marketing*. New York: Harper Collins.
- Smola, K. W. and Sutton, C. D. (2002) "Generational Differences: Revisiting Generational Work Values for the New Millennium," in *Journal of Organizational Behavior*, 23 pp. 363-382.
- Solomon, C. M. (1992). "Managing the Baby Busters," in *Personnel Journal*, 71: pp. 52-59.
- Spitzer, A. B. (1973). "The Historical Problem of Generations.' In *American Historical Review*, 78, pp. 1353-1385.

- Statistics Canada (2000). *Women in Canada 2000: A Gender-based Statistical Report*. Catalogue no. 89-503-XPE.
- Steenkamp, J. E. M., ter Hofstede, F. & Wedel, M. (1999). "A Cross-National Investigation into the Individual and National Cultural Antecedents of Consumer Innovativeness," in *Journal of Marketing* 63, pp 55-69.
- Steers, R. M. & Mowday, R. T., (1981). Employee Turnover and Post-Decision Accommodation Processes, *Research in Organizational Behavior*. 3: 235-281.
- Stevens, J. (1992). *Applied Multivariate Statistics for the Social Sciences* 2nd Ed. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Strong, E. K. (1943). *Vocational Interests of Men and Women*. Stanford University Press.
- Super, D. E. (1970). *Work Values Inventory*. Boston: Houghton Mifflin.
- _____ (1973). "The Work Values Inventory," in *Contemporary Approaches to Interest Measurement*. D. G. Zytowski (ed.), Minneapolis: University of Minnesota Press.
- _____ (1980). "A Life-span, Life-space Approach to Career Development," in *Journal of Occupational Psychology*, 52, pp.129-148.
- _____ (1995) "Values: Their Nature Assessment and Practical Use," Chapter Three in Super, D. E., Sverko, B. and Super, C. M. (Eds.) *Life, Roles, Values and Careers: International Findings of the Work Importance Study*. San Francisco: Jossey-Bass.
- Sverko, B. and Vizek-Vidovic, V.(1995) "Studies of the Meaning of Work: Approaches, Models and Some of the Findings," Chapter Three in Super, D. E., Sverko, B. and Super, C. M. (Eds.) *Life, Roles, Values and Careers: International Findings of the Work Importance Study*. San Francisco: Jossey-Bass.
- Tang, T. L.-P. (1993). "A Factor Analytic Study of the Protestant Work Ethic," in *Journal of Social Psychology*, 133: pp. 109-111.
- Tang, T. L.-P. & Tzeng, J. Y. (1992). "Demographic Correlates of the Protestant Work Ethic," in *Journal of Psychology*, 126: pp. 163-170.

- Taylor, G. S. (1994). "The Relationship Between Sources of New Employees and Attitudes Toward the Job," in *Journal of Social Psychology*, 134, 99-110.
- Taylor, R. N. & Thompson, M. (1976). "Work Value Systems of Young Workers," in *Academy of Management Journal*, 19: pp. 522-536.
- Teevan, J. T. (1989). *Introduction to Sociology: A Canadian Focus*, 3rd Edition. Scarborough: Prentice-Hall
- Thomas, L. E. (1974). "Generational Discontinuity in Beliefs: An Exploration of the Generation Gap," in *Journal of Social Issues*, 30, pp. 1-23.
- Tulgan, B. (1995). *Managing Generation X: How to Bring Out the Best in Young Talent*. Los Angeles: Silver Lake Publications.
- _____ (1997). "Generation X: Slackers? Or the Workforce of the Future?," in *Employment Relations Today*, Summer, pp. 55-64.
- Wayne, F. (1989). "An Instrument to Measure Adherence to the Protestant Work Ethic and Contemporary Work Values," in *Journal of Business Ethics*, 8: pp. 793-804.
- Weber, M. (1958). *The Protestant Ethic and the Spirit of Capitalism*, New York: Charles Scribner's Sons.
- Weick, K. (1995). *Sense Making in Organizations*. London: Sage.
- Weiss, D. J. (1973). "The Minnesota Importance Questionnaire," in *Contemporary Approaches to Interest Measurement*. D. G. Zytowski (ed.), Minneapolis: University of Minnesota Press.
- Wentworth, D. K., & Chell, R. M. (1997). "American College Students and the Protestant Work Ethic," in *Journal of Social Psychology*, 137: pp. 284-296.
- Williams, F. (1968) *Reasoning With Statistics*, Holt, Rinehart and Winston, New York.
- Williams, R. M. Jr. (1979). "Change and Stability in Values and Value Systems: A Sociological Perspective," in *Understanding Human Values: Individual and Societal*, M. Rokeach (Ed.). New York: The Free Press.
- Wollack, S., Goodale, J. G., Wijting, J. P., & Smith, P. C. (1971). "Development of the Survey of Work Values," in *Journal of Applied Psychology*, 55: pp. 331-338.

Zemke, R., Raines, C. and Filipczak, B. (2000). *Generations at Work: Managing the Clash of Veterans, Boomers, Xers, and Nexters in Your Workplace*. Toronto: Amacom.

Zustiak, G. (1996). *The Next Generation: Understanding and Meeting the Needs of Generation X*. Joplin, MO: College Press Publishing Company.

Zytkowski, D.G. (1970). "The Concept of Work Values," in *Vocational Guidance Quarterly*, 18 pp. 176-186.

_____ (1973) *Contemporary Approaches to Interest Measurement*. Minneapolis: University of Minnesota Press.

APPENDICES

Appendix A: Items Included in the Rokeach Values Survey

Terminal Values

A comfortable life (a prosperous life)
 An exciting life (stimulating, active)
 A sense of accomplishment
 A world of peace (free of war and conflict)
 A world of beauty (aesthetic)
 Equality (brotherhood, equal opportunity)
 Family security (taking care of loved ones)
 Freedom (independence, control of destiny)
 Happiness (contentment)
 Inner harmony (free from inner conflict)
 Mature love (sexual and spiritual intimacy)
 National security (protection from attack)
 Pleasure (an enjoyable, leisurely life)
 Salvation (saved, eternal life)
 Self-respect (self-esteem)
 Social recognition (respect, admiration)
 True friendship (close relationship)
 Wisdom (a mature understanding of life)

Instrumental Values

Ambitious (hard-working, aspiring)
 Broadminded (open-minded)
 Capable (competent, effective)
 Cheerful (lighthearted, joyful)
 Clean (neat, tidy)
 Courageous (stand up for beliefs)
 Forgiving (willing to pardon others)
 Helpful (working for others' welfare)
 Honest (sincere, truthful)
 Imaginative (creative)
 Independent (self-reliant, self-sufficient)
 Intellectual (intelligent, reflective)
 Logical (consistent, rational)
 Loving (affectionate, tender)
 Obedient (dutiful, respectful)
 Polite (courteous, well mannered)
 Responsible (dependable, reliable)
 Self controlled (restrained, disciplined)

Source: Rokeach (1973)

Appendix B: Work Values Inventory * (Super, 1970)

The statements below represent values which people consider important in their work. These are satisfactions which people often seek in their jobs or as a result of their jobs. They are not all considered equally important; some are very important to some people but of little importance to others. Read each statement carefully and indicate how important it is for you.

- 5 means "Very Important"
- 4 means "Important"
- 3 means "Moderately Important"
- 2 means "Of little Importance"
- 1 means "Unimportant"

(Circle each item to show your rating of the statement)

Work in which you ...

Altruism:

- help others
- you feel you have helped another person
- add to the well-being of other people

Aesthetic

- need to have artistic ability
- add beauty to the world
- make attractive products

Creativity

- try out new ideas and suggestions
- create something new
- contribute new ideas

Intellectual Stimulation

- have to keep solving new problems
- are challenged mentally
- need to be mentally alert

Achievement

- get the feeling of having done a good day's work
- know by the results when you've done a good job
- see the results of your efforts

Independence

- have freedom in your own area
- make your own decisions
- are your own boss

Prestige

- gain prestige in your field
- know that others consider your work important
- are looked up to by others

Management

- have authority over others
- use leadership abilities
- plan and organize the work of others

Economic Returns

- can get a raise
- have pay increases that keep up with the cost of living
- are paid enough to live right

Security

- know your job will last
- are sure of always having a job
- are sure of another job in the company if your present job ends

Surroundings

- like the setting in which your job is done
- have adequate lounge, toilet and other facilities
- have a good place in which to work (good lighting, quiet, clean, enough space, etc.)

Supervisory Relations

- have a boss who gives you a square deal
- have a boss who is reasonable
- have a supervisor who is considerate

Associates

- are one of the gang
- form friendships with your fellow employees
- have good contacts with fellow workers

Way of Life

- can be the kind of person you would like to be
- have a way of life, while not on the job, that you like
- lead the kind of life you most enjoy

Variety

- look forward to changes in your job
- do not do the same thing all the time
- do many different things

* The items are grouped here according to the values that they represent. The items in the original survey are randomized.

Appendix C: The Items from the Minnesota Importance

Questionnaire

Value	Needs	Phrasing - On My Ideal Job...
Achievement	Achievement	The job could give me a feeling of accomplishment
	Ability Utilization	I could do something that makes use of my abilities
Comfort	Activity	I could be busy all the time
	Extrinsic	My pay would compare well with that of other workers
	Independence	I could work alone on the job
	Security	The job would provide for steady employment
	Variety	I could do something different every day
	Working Conditions	The job would have good working conditions
Status	Advancement	The job would provide an opportunity for advancement
	Authority	I could tell people what to do
	Recognition	I could get recognition for the work I do
	Social Status	I could be "somebody" in the community
Altruism	Co-workers	My co-workers would be easy to make friends with
	Moral Values	I could do work without feeling it is morally wrong
	Social Service	I could do things for other people
Safety	Company Policies and Practices	The company would administer its policies fairly
	Supervision - human relations	My boss would back up his men (with top management)
	Supervision - technical	My boss would train his men well
Autonomy	Creativity	I could try out some of my own ideas
	Responsibility	I could make decisions on my own
	Autonomy	I could plan my work with little supervision

According to Dawis and Lofquist (1984), the six values can be arranged into polar pairings as such:

Achievement → Comfort
 Altruism → Status
 Safety → Autonomy

Appendix D: Mirels and Garrett's (1971) Protestant Ethic Scale

Items:

1. Most people spend too much time in unprofitable amusements
2. Our society would have fewer problems if people has less leisure time
3. Money acquired easily (e.g. through gambling or speculation) is usually spent unwisely.
4. There are few satisfactions equal to the realizations that one has done his best at a job
5. The most difficult college courses usually turn out to be the most rewarding.
6. Most people who don't succeed in life are just plain lazy.
7. The self-made man is likely to be more ethical than the man born to wealth.
8. I often feel I would be more successful if I sacrificed certain pleasures.
9. People should have more leisure time to spend in relaxation (Reverse scored).
10. Any man who is willing and able to work hard has a good chance of succeeding.
11. People who fail at a job usually have not tried hard enough.
12. Life would have very little meaning if we never had to suffer.
13. Hard work offers little guarantee of success (Reverse scored).
14. The credit card is a ticket to careless spending.
15. Life would be more meaningful if we had more leisure time (Reverse scored).
16. The man who can approach an unpleasant task with enthusiasm is the man who gets ahead
17. If one works hard enough he is likely to make a good life for himself.
18. I feel uneasy when there is little work for me to do.
19. A distaste for hard work usually reflects a weakness of character.

Responses: 1 = I disagree strongly . . . 6 = I agree strongly

Appendix E: Blau and Ryan's (1997) Work Ethic Scale

Items related to the virtue of **Hard Work**

1. If you work hard you will succeed
2. If one works hard enough, he or she is likely to make a good life for him/herself
3. Hard work makes one a better person

Items related to a **Non-leisure** ethic

4. People should have more time to spend in relaxation
5. More leisure time is good for people
6. Life would be more meaningful if we had more leisure time

Items related to **Independence**

7. Only those who depend on themselves get ahead in life
8. One should live one's life independent of others as much as possible
9. To be superior a person must stand alone

Items related to **Asceticism**

10. You can't take it with you, so you might as well enjoy yourself
11. If you've got it, why not spend it
12. "Eat drink and be happy, because who knows what tomorrow may bring?" may be stated strongly, but nevertheless it reflects the proper orientation toward life.

Appendix F: Annotated Bibliography of Generational Literature

Adams, M. (1998). *Sex in the Snow: Canadian Social Values at the End of the Millennium*, Toronto: Penguin Books..

Michael Adams, Canadian pollster and sociologist, wrote *Sex in the Snow: Canadian Social Values at the End of the Millennium*, partially in response to the demographic slant of Foot's (1998) *Boom Bust and Echo*. Adams, founder of the research firm Environics, reported on the data obtained through the company's *3SC Social Values Monitor*, a values survey designed to capture trends in social values in several different countries.²⁴ Adams (1998) employs a form of cluster analysis to analyze the values data, revealing a number of "values tribes" within each generation. These tribes could be considered equivalent to 'generation units' in Mannheim's (1952) vernacular. Adams's (1998) research is useful in the context of the present study, as it relates to values and refers specifically to the Canadian population.

Barnard, R., Cosgrave, D. and Welsh, J. (1998). *Chips and Pop: Decoding the Nexus Generation*, Toronto: Malcolm Lester Books.

Another Canadian offering, Barnard, Cosgrave & Welsh's (1998) *Chips & Pop: Decoding the Nexus Generation* serves as a complement to the works of Foot (1998) and Adams (1998). This book focuses exclusively on the generation of people born after the baby boom, which the authors term the "nexus generation" as an alternative to the more common and negative "Generation X." The moniker "Nexus" is intended to portray this generation's important liaison role via the older and younger generations that bound it.

The findings presented in *Chips and Pop* were generated through the research undertaken by the authors' research firm, d~code, which specializes in issues pertaining to the Nexus generation. The book details the values that Nexus members hold as consumers, as citizens and as employees. This information is useful in the context of the present research as a source of suppositions about the values of this generational group, and its place relative to older and younger generations.

Foot, D. K. (1998). *Boom, Bust and Echo 2000: Profiting From the Demographic Shift in the New Millennium*. Toronto:MacFarlane, Walter and Ross

²⁴ An abridged version of the 3SC Social Values survey is available online at <http://3sc.environics.net/surveys/3sc/main/3sc.asp>

Noted Canadian demographer David Foot's (1998) book *Boom, Bust and Echo 2000* provides a demographic breakdown of the generations that have emerged as a result of variations in the birth rate in Canada throughout the 20th century. Foot (1998) explores the opportunities and disadvantages created for generational cohorts by virtue of their relative sizes. While Foot's analysis focuses largely on demographic issues rather than more intrinsic psychological impacts, he provides some useful insights that help to explain the context in which each of the generations has progressed through its life cycle.

Howe, N. and Strauss, B. (1993). *13th Gen: Abort, Retry, Ignore, Fail*. New York: Vintage Books.

Howe and Strauss (1993) are social historians who have traced generational influences throughout American history, positing a dialectic generational pattern of action and reaction between generations. Through reference to media reports, government statistics and images from popular culture, Howe and Strauss's *13th Gen, Abort, Retry, Ignore, Fail?* explores the thirteenth generation of Americans (the generation born following the baby boom) and the salient events that helped to shape the generation, including its interactions with preceding generations. In essence, Howe and Strauss (1993) have written what amounts to an essay on the plight of the post-boom generation and its place in modern society. This book is useful for the purposes of this thesis as a source of characterization of this particular generation.

Izzo, J. B. and Withers, P. (2000). *Values Shift: The New Work Ethic and What it Means for Business*, Toronto: Prentice Hall

Izzo and Withers (2000) are among the few authors who acknowledge the key role of changing values in the broader context of social change. Their book highlights six key shifts in work values that have implications for the ways in which businesses attract, manage and retain employees in the new millennium. These six values shifts involve changes in the ways in which North Americans view their work, and the role that work plays in their lives. Specifically, the authors posit that changing values are creating greater expectations for work-life balance, work that is meaningful and noble, greater opportunity for growth and personal development through working, mutual trust between employees and their organizations, and a workplace that is democratic, communal.

The authors argue that generational values are a key contributor to this shift in work values, although they do not view them as the only influence. As such, the book provides a fresh take on generational differences by setting them within the context of broader social change. While the authors do not make an explicit attempt to explicate the complex relationship between generational values shifts and shifts in values at the societal level, they do make the rare attempt to situate

generational influences within the broader context of social and historical influences. Their work is interesting in the context of this research as a fresh perspective on the issue of generations.

Lancaster, L. and D. Stillman (2002). *When Generations Collide: Who They are, Why they Clash. How to Solve the generational Puzzle at Work.* New York: Harper Collins Publishers.

Lancaster and Stillmand (2002) are 'generational consultants,' who provide business clients with insights on how to bridge generational divides. *When Generations Collide* provides an overview of the generations that corresponds closely to those provided by other authors such as Zemke at al. (2000) and Smith and Smith and Clurman (1997). Like Zemke et al. (2000), Lancaster and Stillman provide practitioner-based advice on a variety of work-related topics such as recruitment, retention, rewards, retirement, balance and recognition, all with specific reference to generational differences. Their ideas are based on the anecdotal evidence they have amassed as consultants, and on survey data that they have collected. This offering is unique in that it is written by co-authors from two different generations, who often reflect on their own generational assumptions and values and the way they affect their perceptions and attitudes.

Mead, M. (1978). *Culture and Commitment: The New Relationships Between the Generations in the 1970s.* New York: Columbia University Press.

In the original 1970 edition of her book *Culture and Commitment*, anthropologist Margaret Mead presented one of the pioneering considerations of the burgeoning "generation gap" that had emerged between young and old Americans in the 1960s. She updated and revised the book in 1978. The key contribution to the generational literature provided in this book is Mead's discussion of the events that led to the creation of a generational divide between those born prior to 1945 and those born after. In a discussion reminiscent of Mannheim (1952), Mead (1978) argued,

Today, suddenly, because all the peoples of the world are part of one electronically based, intercommunicating network, young people everywhere share a kind of experience that none of the elders ever have had or will have. Conversely, the older generation will never see repeated in the lives of young people their own unprecedented experience of sequentially emerging change. This break between generations is wholly new: it is planetary and universal. (p. 64).

It is Mead's supposition that technological change, global integration and the events of WWII (particular the advent of nuclear weapons) created a generational rift, with those on either side of it living in fundamentally different social realities.

The revised edition of her book provides a depiction of the post-war baby boom generation as they entered adulthood in the 1970s. Mead's account is useful in the context of this thesis, to aid in constructing an overview of the Baby Boom generation in contrast to the preceding and following generations.

Smith, J. W. and Clurman, A. (1997). *Rocking the Ages: The Yankelovich Report on Generational Marketing*. New York: Harper Collins.

Smith and Clurman (1997) wrote as consumer researchers employed by the research firm of Yankelovich Partners Inc. The firm conducts a proprietary annual survey of values and buying motivations in the US, called the Yankelovich MONITOR. The MONITOR has surveyed thousands of consumers aged sixteen and older each year since 1971, allowing the company to track changing trends in values and consumer behaviour.

The insights in Smith and Clurman's book *Rocking the Ages* are gleaned from the MONITOR data. Providing a more empirically derived depiction of the various generations, this book is useful in the context of this thesis as a source of information about the values, beliefs and attitudes of the members of each generation.

Zemke, R., Raines, C. and Filipczak, B. (2000). *Generations at Work: Managing the Clash of Veterans, Boomers, Xers, and Nexters in Your Workplace*. Toronto: Amacom.

A number of books have been published in recent years regarding the nature of generational conflict in the workplace. Many of these books focus on the workplace experiences of a single generation, often 'generation X' (e.g. Muchnick, 1996; Zustiak, 1996; Tulgan, 1995). In contrast to such books, Zemke, Raines and Filipczak (2000) provide one of the few comprehensive considerations of all of the generations that currently cohabitate in the workforce. The authors glean their insights from anecdotal evidence they have amassed in their careers as management consultants. Although the book is aimed at a practitioner audience and is therefore lacking in any theoretical or empirical grounding, it does nonetheless represent a useful example of the stereotypes of the various generations that pervade the media and popular press. These stereotypes are employed in the context of the present research in order to build characterizations of the generations that can be compared with empirical findings.

Appendix G: Adams's (1998) Value Tribes

Age Cohort (%)	Value Tribe (%)	Key values
Elders Born prior to the mid-1940s	Rational Traditionalists (54%)	<ul style="list-style-type: none"> • Religiosity • Reason • Respect for Historical Tradition • Respect for Authority • Duty • Guilt • Deferred Gratification
	Extroverted Traditionalists (26%)	<ul style="list-style-type: none"> • Religiosity • Family • Respect for Historical Tradition • Respect for Institutions • Duty • Fear • Deferred Gratification
	Cosmopolitan Modernists (20%)	<ul style="list-style-type: none"> • Global World View • Respect for Education • Desire for Innovation
Boomers Mid-1940s to mid-1960s	Autonomous Rebels (25%)	<ul style="list-style-type: none"> • Strong Belief in Human Rights • Skepticism toward Traditional Institutions • Suspicion of Authority • Freedom • Individuality • Respect for Education
	Anxious Communitarians (20%)	<ul style="list-style-type: none"> • Family • Community • Fear • Duty • Need for Respect
	Connected Enthusiasts (14%)	<ul style="list-style-type: none"> • Family • Community • Hedonism • Immediate Gratification
	Disengaged Darwinist (41%)	<ul style="list-style-type: none"> • Fear • Nostalgia for the Past

Continued on next page

Gen-Xers Mid 1960s to early 1980s	Aimless Dependents (27%)	<ul style="list-style-type: none">• Fear• Desire for Independence
	New Aquarians (13%)	<ul style="list-style-type: none">• Egalitarianism• Ecologism• Hedonism
	Autonomous Post-Materialists (20%)	<ul style="list-style-type: none">• Freedom• Respect for Human Rights
	Social Hedonists (15%)	<ul style="list-style-type: none">• Aesthetics• Hedonism• Sexual Permissiveness• Immediate Gratification
	Thrill-Seeking Materialists (25%)	<ul style="list-style-type: none">• Desire for Money and Material Possessions• Desire for Recognition, Respect and Admiration

Appendix H: The Schwartz Value Survey

AS A GUIDING PRINCIPLE IN MY LIFE, this value is:

- | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------------|------------------|---|---|-----------|---|---|-------------------|-----------------------------|
| opposed
to my
values | not
important | | | important | | | very
important | of
supreme
importance |
1. Equality (equal opportunity for all) †
 2. Inner Harmony (at peace with myself)* †
 3. Social Power (control over others, dominance)
 4. Pleasure (gratification of desires) †
 5. Freedom (freedom of action and thought) †
 6. A Spiritual Life (emphasis on spiritual not material matters)*
 7. Sense of Belonging (feeling that others care about me)*
 8. Social Order (stability of society)
 9. An Exciting Life (stimulating experiences) †
 10. Meaning in Life (a purpose in life)*
 11. Politeness (courtesy, good manners) †
 12. Wealth (material possessions, money)
 13. National Security (protection of my nation from enemies) †
 14. Self-Respect (belief in one's own worth)*
 15. Reciprocation of Favours (avoidance of indebtedness)
 16. Creativity (uniqueness, imagination)
 17. A World at Peace (free of war and conflict) †
 18. Respect for Tradition (preservation of time-honoured customs)
 19. Mature Love (deep emotional and spiritual intimacy)* †
 20. Self-Discipline (self-restraint, resistance to temptation)
 21. Detachment (from worldly concerns)*
 22. Family Security (safety for loved ones) †
 23. Social Recognition (respect, approval by others)* †
 24. Unity with Nature (fitting into nature)
 25. A Varied Life (filled with challenge, novelty, and change)
 26. Wisdom (a mature understanding of life) †
 27. Authority (the right to lead or command)
 28. True Friendship (close, supportive friends)* †
 29. A World of Beauty (beauty of nature and the arts) †
 30. Social Justice (correcting injustice, care for the weak)
 31. Independent (self-reliant, self-sufficient) †
 32. Moderate (avoiding extremes of feeling and action)
 33. Loyal (faithful to my friends, group)
 34. Ambitious (hard working, aspiring) †

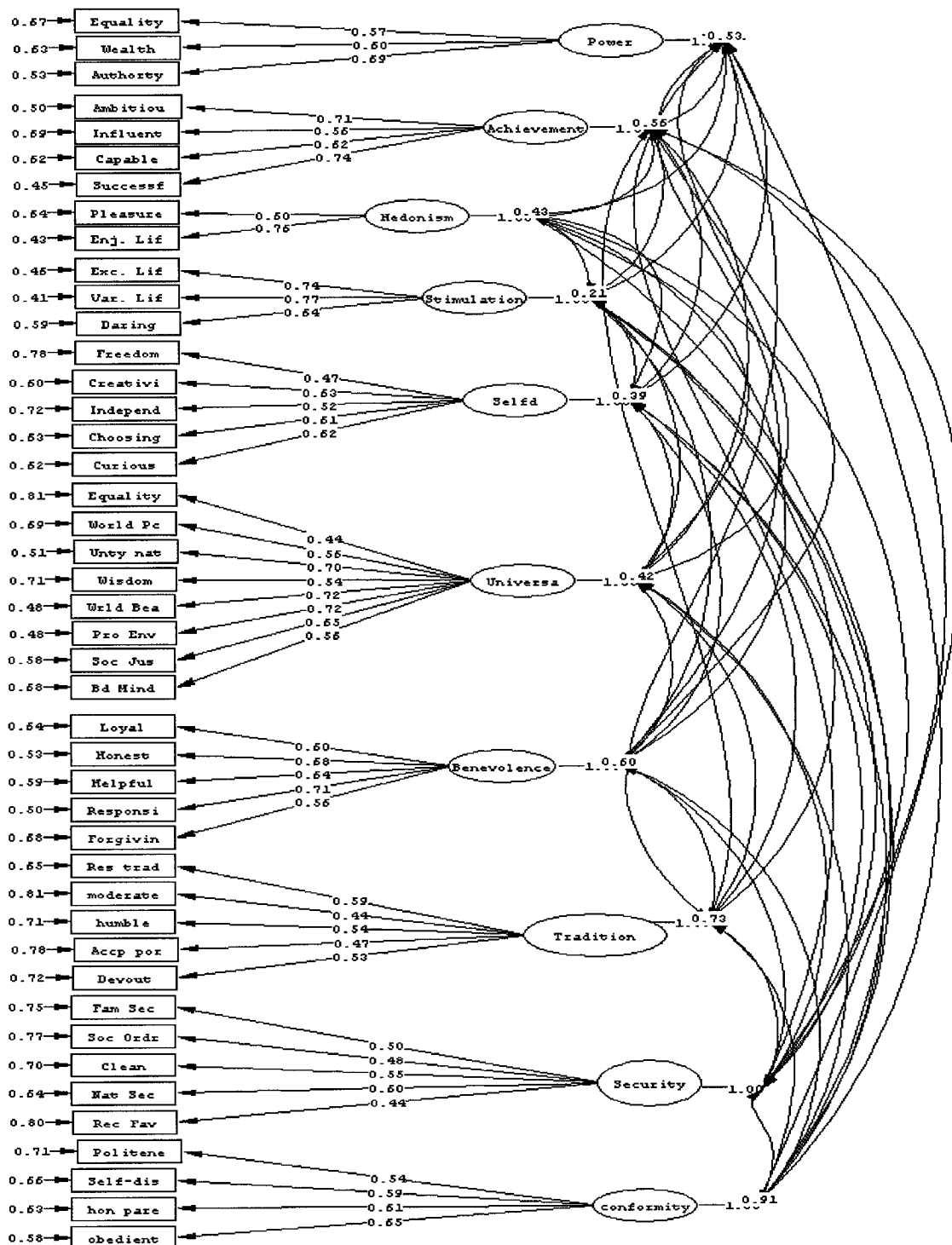
35. Broad-Minded (tolerant of different ideas and beliefs) †
36. Humble (modest, self-effacing)
37. Daring (seeking adventure, risk)
38. Protecting the Environment (preserving nature)
39. Influential (having an impact on people and events)
40. Honouring of Parents and Elders (showing respect)
41. Choosing Own Goals (selecting own purposes)
42. Healthy (not being sick physically or mentally)*
43. Capable (competent, effective, efficient) †
44. Accepting My Portion in Life (submitting to life's circumstances)
45. Honest (genuine, sincere) †
46. Preserving My Public Image (protecting my "face")*
47. Obedient (dutiful, meeting obligations) †
48. Intelligent (logical, thinking)*
49. Helpful (working for the welfare of others) †
50. Enjoying Life (enjoying food, sex, leisure, etc.)
51. Devout (holding to religious faith and belief)
52. Responsible (dependable, reliable) †
53. Curious (interested in everything, exploring)
54. Forgiving (willing to pardon others) †
55. Successful (achieving goals)
56. Clean (neat, tidy) †

Source: Schwartz (1992)

* Item excluded by Schwartz and Sagiv (1995)

† Taken from Rokeach (1973)

Appendix I: SEM Path Diagram for the 10 SVS Factors



Chi-Square=5971.55, df=857, P-value=0.00000, RMSEA=0.071

PHI

	Power	Achievement	Hedonism	Stimulation	Self-direction	Universal	Benev	Tradition	Conformity	Security
Power	1.00									
Achievement	0.59	1.00								
Hedonism	0.44	0.57	1.00							
Stimulation	0.37	0.63	0.73	1.00						
Self-direction	0.23	0.72	0.55	0.78	1.00					
Universalism	-0.01	0.39	0.34	0.48	0.77	1.00				
Benevolence	-0.01	0.61	0.26	0.28	0.63	0.63	1.00			
Tradition	0.41	0.46	0.15	0.21	0.30	0.39	0.71	1.00		
Conformity	0.35	0.62	0.23	0.20	0.40	0.41	0.85	1.02	1.00	
Security	0.53	0.56	0.43	0.21	0.39	0.42	0.60	0.73	0.91	1.00

Appendix J: Work Values Measures Reviewed for this Study

Author(s)/Year	Instrument	Description
Gay et al. (1971)	Minnesota Importance Questionnaire (MIQ)	21-item measure of items considered important to employees in their work. It was designed as part of the broader theory of work adjustment. The items are listed in Appendix D.
Super (1970)	Work Values Inventory (WVI)	15-item measure of "satisfactions which people often seek in their jobs or as a result of their jobs." The items from the WVI are given in Appendix C.
Manhardt (1972)	Manhardt Scale	25-item measure designed to capture gender-related differences in preferences to various job characteristics. Respondents are asked to score the importance of job characteristics on a 5-point scale (e.g. "permits working independently")
Billings and Cornellius (1980)	Work Outcomes Measure	21-item measure of work outcomes based on the earlier work of Dyer and Parker (1975). While the measure is not designed to measure work values per se, the items are consistent, and in most cases identical to those used in work values measures.
Jurgensen (1978)	Job Preferences Form	10-item measure of job preferences ("what makes a job good or bad"). Items are phrased as individual words or phrases followed by short descriptions e.g. ADVANCEMENT (Opportunity for promotion)
Pryor (1979)	Work Aspect Preference Scale (WAPS)	52-item scale measuring 13 different values items (referred to as work aspects)
Harrington & O'Shea (1989)	Harrington - O'Shea Career Decision-Making System	14-item measure of work values which requires the respondent to select their four most important items. The instrument was designed for the purpose of career counseling for high school students.
McKeen and Beatty (1992)	Generation X Value Survey	16-item questionnaire designed to examine Generation X values. 12 of the items are scored on an importance rating scale and relate to work.
Elizur (1994)	Elizur Work Values Questionnaire	24-item questionnaire on work values including items meant to capture both intrinsic and extrinsic elements of work.
Mason (1994)	Work Values Survey	14-item measure in which respondents were asked to select the seven most relevant values to them.

England et al. (1995)	Meaning of Working (MOW) Survey	The MOW survey is an instrument designed as part of an ongoing international research project regarding the way that people view work as part of their lives. Two of the questions (# 17 and #18) ask respondents to rank a number of work values with respect to their importance. The 16 items included in these questions were considered in this review.
Sagie et al. (1996)	Personal Value Questionnaire	54-item questionnaire designed to assess people's values in six realms of life, including work. The nine work related items were considered in this review

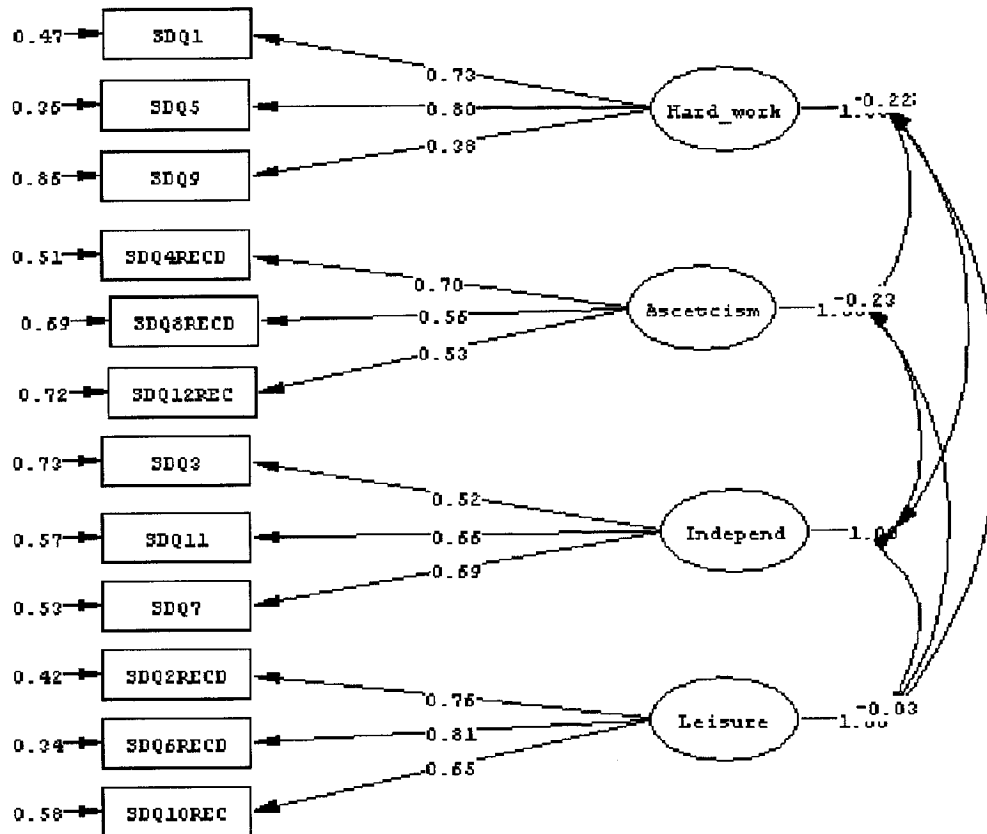
Appendix K: Work Values Items Included in this Study

1	Achievement/Accomplishment	Doing work that provides you with a personal sense of ACCOMPLISHMENT
2	Altruism/Contribution to Society	Doing work that makes a helpful CONTRIBUTION to society; makes a difference
3	Authority/Responsibility	Having the AUTHORITY to organize and direct the work of others
4	Autonomy	Having the AUTONOMY to make decisions about how you do your work and spend your time
5	Benefits	Having BENEFITS (e.g. vacation pay, health/dental insurance, pension plan, etc.) that meet your personal needs
6	Challenging Work	Working on tasks and projects that CHALLENGE my abilities
7	Competence-Based Rewards	Working in a setting where rewards are based on COMPETENCE
8	Creativity	Doing work that involves CREATIVITY and original thought
9	Fairness in Rules/Treatment	Working in a setting where policies and programs are administered with FAIRNESS and impartiality
10	Feedback	Having management that provides timely and constructive FEEDBACK about your performance
11	Friendly Co-workers	Working with agreeable and friendly CO-WORKERS with whom you could form friendships
12	Fun Work Environment	Working in an environment that is lively and FUN
13	Growth and Development	Having the opportunity to CONTINUOUSLY LEARN and develop new knowledge and skills
14	Hours of Work	Having HOURS OF WORK that are convenient to your life
15	Independence	Having the ability to WORK ALONE , without having to rely on others
16	Influencing Organizational Outcomes	Having the ability to INFLUENCE organizational outcomes
17	Intellectually Stimulating	Doing work that is INTELLECTUALLY STIMULATING
18	Interesting/Enjoyable Work	Doing work that you find INTERESTING , exciting and engaging
19	Job Security	Having the assurance of JOB SECURITY
20	Lifestyle/Work-Life Balance	Working in an environment that allows you to BALANCE your work life with your private life and family responsibilities
21	Manager/Supervisor Relations	Working for a SUPERVISOR who is considerate and supportive
22	Meaningful/Fulfilling Work	Doing work that you find personally FULFILLING
23	Moral/Ethical Values	Doing work that is consistent with your MORAL VALUES
24	Opportunities for Advancement	Having the opportunity for ADVANCEMENT in your career
25	Pay	Doing work that affords you a good SALARY
26	Prestige/Status	Doing work that is PRESTIGIOUS and regarded highly by others
27	Recognition	Working in a setting where RECOGNITION is given for a job well done
28	Travel	Doing work that allows me to TRAVEL and see the world
29	Using Skills/Abilities	Doing work that allows you to USE the ABILITIES you have developed through your education and experience
30	Variety and Change	Doing work that provides change and VARIETY in work activities
31	Working Conditions/Surroundings	Working in a PHYSICAL SETTING in which you are comfortable

Appendix L: Correlation of Work Values Intensity & Priority Measures

Item	Correlation	Sig.	% of variance
Accomplishment	0.53	0.00	28.00%
Advancement	0.78	0.00	60.32%
Authority	0.75	0.00	55.73%
Autonomy	0.60	0.00	36.31%
Balance	0.73	0.00	53.39%
Benefits	0.71	0.00	50.74%
Challenge	0.63	0.00	40.26%
Competence	0.64	0.00	41.03%
Continuously learn	0.70	0.00	49.41%
Contribution	0.63	0.00	39.46%
Coworkers	0.68	0.00	46.79%
Creativity	0.74	0.00	55.15%
Fairness	0.63	0.00	39.95%
Feedback	0.63	0.00	39.90%
Fulfilling	0.63	0.00	39.31%
Fun	0.53	0.00	27.57%
Hours of work	0.70	0.00	49.41%
Influence	0.68	0.00	46.74%
Intellectually stimulating	0.71	0.00	50.68%
Interesting	0.64	0.00	41.41%
Job security	0.78	0.00	60.39%
Moral values	0.76	0.00	58.11%
Physical setting	0.67	0.00	45.17%
Prestigious	0.80	0.00	63.27%
Recognition	0.68	0.00	45.75%
Salary	0.74	0.00	54.06%
Supervisor	0.68	0.00	46.16%
Travel	0.81	0.00	65.61%
Use one's abilities	0.72	0.00	51.14%
Variety	0.64	0.00	40.66%
Work alone	0.71	0.00	50.51%

Appendix M: SEM Path Diagram for the PWE Factors*



Chi-Square=277.30, df=48, P-value=0.00000, RMSEA=0.068

* Variable labels refer to question numbers (e.g. SDQ1 is section D, Question 1)

PHI

	Hard work	Asceticism	Leisure	Independence
Hard work	1.00			
Asceticism	-0.11	1.00		
Leisure	-0.05	0.38	1.00	
Independence	0.22	-	0.23	-0.03

Appendix N: Survey Questionnaire

Generational Values in Life and Work A National Study

General Instructions:

Thank you for taking the time to complete this survey. Please feel free to leave blank any question that you are uncomfortable answering for any reason. Please print this survey and complete it manually. Please send the completed survey to the Centre for Research and Education on Women and Work at the coordinates listed below.

REPLIES TO:

Centre for Research and Education on Women and Work (CREWW)

Carleton University
Room 710C Dunton Tower
Ottawa, ON K1S 5B6
FAX: (613) 520-2652

Sean Lyons
Doctoral Candidate
Sprott School of Business,
Carleton University, Ottawa
e-mail: slyons@sprott.carleton.ca

Section A: Your Personal Values

The items below represent values that people use as criteria to guide their attitudes and behaviours. Not all of these items are equally important, and different people will place importance on different items.

Carefully read each of the items listed below. Rate the importance of each **AS A GUIDING PRINCIPLE IN YOUR LIFE** by circling the appropriate number. If you feel that the item is opposed to your values, circle the number -1.

How important is each of the following to you AS A GUIDING PRINCIPLE IN YOUR LIFE?	Opposed to my values	Not important			Important			Very Important	Of Supreme Importance
	-1	0	1	2	3	4	5	6	7
EQUALITY (equal opportunity for all)	-1	0	1	2	3	4	5	6	7
SOCIAL POWER (control over others, dominance)	-1	0	1	2	3	4	5	6	7
PLEASURE (gratification of desires)	-1	0	1	2	3	4	5	6	7
FREEDOM (freedom of action and thought)	-1	0	1	2	3	4	5	6	7
SOCIAL ORDER (stability of society)	-1	0	1	2	3	4	5	6	7
AN EXCITING LIFE (stimulating experiences)	-1	0	1	2	3	4	5	6	7
POLITENESS (courtesy, good manners)	-1	0	1	2	3	4	5	6	7
WEALTH (material possessions, money)	-1	0	1	2	3	4	5	6	7
NATIONAL SECURITY (protection of my nation from enemies)	-1	0	1	2	3	4	5	6	7
RECIPROCATION OF FAVOURS (avoidance of indebtedness)	-1	0	1	2	3	4	5	6	7
CREATIVITY (uniqueness, imagination)	-1	0	1	2	3	4	5	6	7
A WORLD AT PEACE (free of war and conflict)	-1	0	1	2	3	4	5	6	7
RESPECT FOR TRADITION (preservation of time-honoured customs)	-1	0	1	2	3	4	5	6	7
SELF-DISCIPLINE (self-restraint, resistance to temptation)	-1	0	1	2	3	4	5	6	7
FAMILY SECURITY (safety for loved ones)	-1	0	1	2	3	4	5	6	7
UNITY WITH NATURE (fitting into nature)	-1	0	1	2	3	4	5	6	7
A VARIED LIFE (filled with challenge, novelty, and change)	-1	0	1	2	3	4	5	6	7
WISDOM (a mature understanding of life)	-1	0	1	2	3	4	5	6	7
AUTHORITY (the right to lead or command)	-1	0	1	2	3	4	5	6	7
A WORLD OF BEAUTY (beauty of nature and the arts)	-1	0	1	2	3	4	5	6	7
SOCIAL JUSTICE (correcting injustice, care for the weak)	-1	0	1	2	3	4	5	6	7
INDEPENDENT (self-reliant, self-sufficient)	-1	0	1	2	3	4	5	6	7
MODERATE (avoiding extremes of feeling and action)	-1	0	1	2	3	4	5	6	7
LOYAL (faithful to my friends, group)	-1	0	1	2	3	4	5	6	7
AMBITIOUS (hard working, aspiring)	-1	0	1	2	3	4	5	6	7

How important is each of the following to you AS A GUIDING PRINCIPLE IN YOUR LIFE?	Opposed to my Values	Not Important			Important			Very Important	Of Supreme Importance
BROAD-MINDED (tolerant of different ideas and beliefs)	-1	0	1	2	3	4	5	6	7
HUMBLE (modest, self-effacing)	-1	0	1	2	3	4	5	6	7
DARING (seeking adventure, risk)	-1	0	1	2	3	4	5	6	7
PROTECTING THE ENVIRONMENT (preserving nature)	-1	0	1	2	3	4	5	6	7
INFLUENTIAL (having an impact on people and events)	-1	0	1	2	3	4	5	6	7
HONOURING OF PARENTS AND ELDERS (showing respect)	-1	0	1	2	3	4	5	6	7
CHOOSING OWN GOALS (selecting own purposes)	-1	0	1	2	3	4	5	6	7
CAPABLE (competent, effective, efficient)	-1	0	1	2	3	4	5	6	7
ACCEPTING MY PORTION IN LIFE (submitting to life's circumstances)	-1	0	1	2	3	4	5	6	7
HONEST (genuine, sincere)	-1	0	1	2	3	4	5	6	7
OBEDIENT (dutiful, meeting obligations)	-1	0	1	2	3	4	5	6	7
HELPFUL (working for the welfare of others)	-1	0	1	2	3	4	5	6	7
ENJOYING LIFE (enjoying food, sex, leisure, etc.)	-1	0	1	2	3	4	5	6	7
DEVOUT (holding to religious faith and belief)	-1	0	1	2	3	4	5	6	7
RESPONSIBLE (dependable, reliable)	-1	0	1	2	3	4	5	6	7
CURIOUS (interested in everything, exploring)	-1	0	1	2	3	4	5	6	7
FORGIVING (willing to pardon others)	-1	0	1	2	3	4	5	6	7
SUCCESSFUL (achieving goals)	-1	0	1	2	3	4	5	6	7
CLEAN (neat, tidy)	-1	0	1	2	3	4	5	6	7

Section B: Work Values

The items below represent values that people consider to be important in their work. People use these values in making important decisions about their jobs and careers. They are not all considered to be equally important and different people place importance on different values.

Carefully read each of the 31 items below and indicate **how important each item is to you** by circling the number that corresponds to the most appropriate response. If you feel that the item is opposed to your values, circle the number -1.

How important is each of the following to you WITH RESPECT TO WORK?	Opposed to my Values	Not Important			Important			Very Important	Of Supreme Importance
Doing work that provides you with a personal sense of ACCOMPLISHMENT	-1	0	1	2	3	4	5	6	7
Doing work that makes a helpful CONTRIBUTION to society; makes a difference	-1	0	1	2	3	4	5	6	7
Having the AUTHORITY to organize and direct the work of others	-1	0	1	2	3	4	5	6	7
Having the AUTONOMY to make decisions about how you do your work and spend your time	-1	0	1	2	3	4	5	6	7
Having BENEFITS (e.g. vacation pay, health/dental insurance, pension plan, etc.) that meet your personal needs	-1	0	1	2	3	4	5	6	7
Working on tasks and projects that CHALLENGE your abilities	-1	0	1	2	3	4	5	6	7
Working in a setting where rewards are based on COMPETENCE	-1	0	1	2	3	4	5	6	7
Doing work that involves CREATIVITY and original thought	-1	0	1	2	3	4	5	6	7
Working in a setting where policies and programs are administered with FAIRNESS and impartiality	-1	0	1	2	3	4	5	6	7
Having management that provides timely and constructive FEEDBACK about your performance	-1	0	1	2	3	4	5	6	7
Working with agreeable and friendly CO-WORKERS with whom you could form friendships	-1	0	1	2	3	4	5	6	7
Working in an environment that is lively and FUN	-1	0	1	2	3	4	5	6	7
Having the opportunity to CONTINUOUSLY LEARN and develop new knowledge and skills	-1	0	1	2	3	4	5	6	7
Having HOURS OF WORK that are convenient to your life	-1	0	1	2	3	4	5	6	7
Having the ability to WORK ALONE , without having to rely on others	-1	0	1	2	3	4	5	6	7
Having the ability to INFLUENCE organizational outcomes	-1	0	1	2	3	4	5	6	7
Doing work that is INTELLECTUALLY STIMULATING	-1	0	1	2	3	4	5	6	7

How important is each of the following to you WITH RESPECT TO WORK?	Opposed to my Values	Not Important			Important			Very Important Of Supreme Importance	
Doing work that you find INTERESTING , exciting and engaging	-1	0	1	2	3	4	5	6	7
Having the assurance of JOB SECURITY	-1	0	1	2	3	4	5	6	7
Working in an environment that allows you to BALANCE your work life with your private life and family responsibilities	-1	0	1	2	3	4	5	6	7
Working for a SUPERVISOR who is considerate and supportive	-1	0	1	2	3	4	5	6	7
Doing work that you find personally FULFILLING	-1	0	1	2	3	4	5	6	7
Doing work that is consistent with your MORAL VALUES	-1	0	1	2	3	4	5	6	7
Having the opportunity for ADVANCEMENT in your career	-1	0	1	2	3	4	5	6	7
Doing work that affords you a good SALARY	-1	0	1	2	3	4	5	6	7
Doing work that is PRESTIGIOUS and regarded highly by others	-1	0	1	2	3	4	5	6	7
Working where RECOGNITION is given for a job well done	-1	0	1	2	3	4	5	6	7
Doing work that allows you to TRAVEL and see the world	-1	0	1	2	3	4	5	6	7
Doing work that allows you to USE the ABILITIES you have developed through your education and experience	-1	0	1	2	3	4	5	6	7
Doing work that provides change and VARIETY in work activities	-1	0	1	2	3	4	5	6	7
Working in a PHYSICAL SETTING in which you are comfortable	-1	0	1	2	3	4	5	6	7

>>>>PLEASE TURN TO THE NEXT PAGE >>>>

Section C: Prioritization of Work Values

Work values are important criteria that individuals use in making decisions about their jobs and careers. Although many values may be important to us, we are often required to make choices between competing values when making work-related decisions.

This section asks you to consider the work values that you just rated in Section B, this time considering the likelihood of each of these values being a top priority in making important work decisions.

Carefully read each of the 31 items below and indicate **how likely each item is to be a TOP PRIORITY** for you in deciding whether to accept a job or remain in a job by circling the number that corresponds to the most appropriate response. If you feel that the item is opposed to your values, circle the number -1.

How likely is it that each of the following items will be a TOP PRIORITY for you in deciding to accept a job or stay in a job?	Opposed to my Values	Not Likely			Likely			Very Likely	A Definite Priority
Doing work that provides you with a personal sense of ACCOMPLISHMENT	-1	0	1	2	3	4	5	6	7
Doing work that makes a helpful CONTRIBUTION to society; makes a difference	-1	0	1	2	3	4	5	6	7
Having the AUTHORITY to organize and direct the work of others	-1	0	1	2	3	4	5	6	7
Having the AUTONOMY to make decisions about how you do your work and spend your time	-1	0	1	2	3	4	5	6	7
Having BENEFITS (e.g. vacation pay, health/dental insurance, pension plan, etc.) that meet your personal needs	-1	0	1	2	3	4	5	6	7
Working on tasks and projects that CHALLENGE your abilities	-1	0	1	2	3	4	5	6	7
Working in a setting where rewards are based on COMPETENCE	-1	0	1	2	3	4	5	6	7
Doing work that involves CREATIVITY and original thought	-1	0	1	2	3	4	5	6	7
Working in a setting where policies and programs are administered with FAIRNESS and impartiality	-1	0	1	2	3	4	5	6	7
Having management that provides timely and constructive FEEDBACK about your performance	-1	0	1	2	3	4	5	6	7
Working with agreeable and friendly CO-WORKERS with whom you could form friendships	-1	0	1	2	3	4	5	6	7
Working in an environment that is lively and FUN	-1	0	1	2	3	4	5	6	7
Having the opportunity to CONTINUOUSLY LEARN and develop new knowledge and skills	-1	0	1	2	3	4	5	6	7
Having HOURS OF WORK that are convenient to your life	-1	0	1	2	3	4	5	6	7

How likely is it that each of the following items will be a TOP PRIORITY for you in deciding to accept a job or stay in a job?	Opposed to my values	Not Likely			Likely			Very Likely	A Definite Priority
Having the ability to WORK ALONE , without having to rely on others	-1	0	1	2	3	4	5	6	7
Having the ability to INFLUENCE organizational outcomes	-1	0	1	2	3	4	5	6	7
Doing work that is INTELLECTUALLY STIMULATING	-1	0	1	2	3	4	5	6	7
Doing work that you find INTERESTING , exciting and engaging	-1	0	1	2	3	4	5	6	7
Having the assurance of JOB SECURITY	-1	0	1	2	3	4	5	6	7
Working in an environment that allows you to BALANCE your work life with your private life and family responsibilities	-1	0	1	2	3	4	5	6	7
Working for a SUPERVISOR who is considerate and supportive	-1	0	1	2	3	4	5	6	7
Doing work that you find personally FULFILLING	-1	0	1	2	3	4	5	6	7
Doing work that is consistent with your MORAL VALUES	-1	0	1	2	3	4	5	6	7
Having the opportunity for ADVANCEMENT in your career	-1	0	1	2	3	4	5	6	7
Doing work that affords you a good SALARY	-1	0	1	2	3	4	5	6	7
Doing work that is PRESTIGIOUS and regarded highly by others	-1	0	1	2	3	4	5	6	7
Working where RECOGNITION is given for a job well done	-1	0	1	2	3	4	5	6	7
Doing work that allows you to TRAVEL and see the world	-1	0	1	2	3	4	5	6	7
Doing work that allows you to USE the ABILITIES you have developed through your education and experience	-1	0	1	2	3	4	5	6	7
Doing work that provides change and VARIETY in work activities	-1	0	1	2	3	4	5	6	7
Working in a PHYSICAL SETTING in which you are comfortable	-1	0	1	2	3	4	5	6	7

Section D: Values Regarding Work in General

Carefully read each of the statements listed below, indicating your level of agreement with each statement by circling the appropriate number. If you neither agree nor disagree with the statement, circle the number 3 to indicate "Neutral."

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Slightly Disagree</i>	<i>Neutral</i>	<i>Slightly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
If one works hard enough, he or she is likely to make a good life for him/herself	0	1	2	3	4	5	6
People should have more leisure time to spend in relaxation.	0	1	2	3	4	5	6
Only those who depend on themselves get ahead in life.	0	1	2	3	4	5	6
You can't take it with you, so you might as well enjoy yourself while you can.	0	1	2	3	4	5	6
If you work hard you will succeed.	0	1	2	3	4	5	6
More leisure time is good for people.	0	1	2	3	4	5	6
One should live one's life independent of others as much as possible.	0	1	2	3	4	5	6
If you've got it, why not spend it?	0	1	2	3	4	5	6
Hard work makes one a better person.	0	1	2	3	4	5	6
Life would be more meaningful if we had more leisure time.	0	1	2	3	4	5	6
To be superior a person must stand alone.	0	1	2	3	4	5	6
"Eat, drink and be happy, because who knows what tomorrow will bring?" may be stated strongly but nevertheless it reflects the proper orientation toward life.	0	1	2	3	4	5	6

>>>>PLEASE TURN TO THE NEXT PAGE >>>>

Section E: Information About You

We need some information about you to help us interpret this questionnaire. To answer the following questions, please **CIRCLE** the number of the answer that best describes you and/or **FILL IN** the information requested. Please be assured that your responses will be held in confidence by the researchers.

1. What is your age? _____ Years
2. What is your present marital status?
 1. NEVER MARRIED
 2. MARRIED OR LIVING WITH A PARTNER
 3. SEPARATED OR DIVORCED
 4. WIDOWED
3. How many children do you have? _____ Child(ren)
4. If you have children, please provide the age of each of them in the spaces below.

Child #1 _____ YEARS OLD	Child #4 _____ YEARS OLD
Child #2 _____ YEARS OLD	Child #5 _____ YEARS OLD
Child #3 _____ YEARS OLD	Child #6 _____ YEARS OLD

Thank you for completing this questionnaire.

Your responses will be held in confidence by the researchers. Please contact us by email if you have any concerns.

Contact person:

Sean Lyons
 Eric Sprott School of Business,
 Carleton University
 e-mail: [**slyons@sprott.carleton.ca**](mailto:slyons@sprott.carleton.ca)
 FAX: (613) 520-2652

Appendix O: SPSS Output for MANOVA 1 – General Values (All Generations)

Between-Subjects Factors

		Value Label	N
Gender	1	Male	396
	2	Female	712
Generation	1.00	Echo	131
	2.00	Gen X	635
	3.00	Boomer	289
	4.00	Mature	53

Multivariate Tests (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.954	3354.880	6.000	972.000	.000	.954	1.000
	Wilks' Lambda	.046	3354.880	6.000	972.000	.000	.954	1.000
	Hotelling's Trace	20.709	3354.880	6.000	972.000	.000	.954	1.000
	Roy's Largest Root	20.709	3354.880	6.000	972.000	.000	.954	1.000
Gender	Pillai's Trace	.039	6.611	6.000	972.000	.000	.039	.999
	Wilks' Lambda	.961	6.611	6.000	972.000	.000	.039	.999
	Hotelling's Trace	.041	6.611	6.000	972.000	.000	.039	.999
	Roy's Largest Root	.041	6.611	6.000	972.000	.000	.039	.999
Generation	Pillai's Trace	.153	8.721	18.000	2922.000	.000	.051	1.000
	Wilks' Lambda	.851	8.946	18.000	2749.716	.000	.052	1.000
	Hotelling's Trace	.170	9.148	18.000	2912.000	.000	.054	1.000
	Roy's Largest Root	.133	21.522	6.000	974.000	.000	.117	1.000
Gender X Generation	Pillai's Trace	.014	.782	18.000	2922.000	.723	.005	.597
	Wilks' Lambda	.986	.783	18.000	2749.716	.723	.005	.564
	Hotelling's Trace	.015	.783	18.000	2912.000	.722	.005	.598
	Roy's Largest Root	.011	1.862	6.000	974.000	.084	.011	.698

a Computed using alpha = .05

Tests of Between-Subjects Effects (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	154.266	7	22.038	13.617	.000	.080	1.000
	Hedonism	122.522	7	17.503	10.693	.000	.064	1.000
	Stimulation	98.076	7	14.011	7.466	.000	.045	1.000
	Self-Direction	13.083	7	1.869	1.923	.063	.012	.766
	Universalism	78.289	7	11.184	10.072	.000	.060	1.000
	Benevolence	25.834	7	3.691	3.775	.000	.023	.980
	Tradition	21.763	7	3.109	1.818	.080	.011	.737
	Conformity	23.051	7	3.293	2.521	.014	.016	.885
	Security	20.756	7	2.965	2.526	.014	.016	.886
	Achievement	47.529	7	6.790	5.888	.000	.036	.999

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Intercept	Power	2814.644	1	2814.644	1739.134	.000	.613	1.000
	Hedonism	11051.113	1	11051.113	6751.176	.000	.860	1.000
	Stimulation	7822.953	1	7822.953	4168.427	.000	.791	1.000
	Self-Direction	12561.397	1	12561.397	12924.882	.000	.922	1.000
	Universalism	11991.090	1	11991.090	10798.838	.000	.908	1.000
	Benevolence	13159.737	1	13159.737	13459.501	.000	.924	1.000
	Tradition	5862.749	1	5862.749	3427.766	.000	.757	1.000
	Conformity	10964.145	1	10964.145	8394.671	.000	.884	1.000
	Security	11145.056	1	11145.056	9493.978	.000	.896	1.000
Achievement	10878.960	1	10878.960	9433.730	.000	.896	1.000	
GENDER	Power	5.187	1	5.187	3.205	.074	.003	.432
	Hedonism	4.067	1	4.067	2.485	.115	.002	.350
	Stimulation	.958	1	.958	.510	.475	.000	.110
	Self-Direction	3.176	1	3.176	3.268	.071	.003	.439
	Universalism	11.469	1	11.469	10.329	.001	.009	.895
	Benevolence	5.772	1	5.772	5.903	.015	.005	.680
	Tradition	4.016E-02	1	4.016E-02	.023	.878	.000	.053
	Conformity	2.782E-04	1	2.782E-04	.000	.988	.000	.050
	Security	4.429E-02	1	4.429E-02	.038	.846	.000	.054
Generation	Achievement	6.283	1	6.283	5.449	.020	.005	.645
	Power	122.169	3	40.723	25.162	.000	.064	1.000
	Hedonism	107.965	3	35.988	21.985	.000	.057	1.000
	Stimulation	83.512	3	27.837	14.833	.000	.039	1.000
	Self-Direction	4.486	3	1.495	1.539	.203	.004	.408
	Universalism	40.767	3	13.589	12.238	.000	.032	1.000
	Benevolence	11.135	3	3.712	3.796	.010	.010	.817
	Tradition	20.785	3	6.928	4.051	.007	.011	.844
	Conformity	14.460	3	4.820	3.690	.012	.010	.805
Security	13.996	3	4.665	3.974	.008	.011	.836	
Gender X Generation	Achievement	35.073	3	11.691	10.138	.000	.027	.998
	Power	14.514	3	4.838	2.989	.030	.008	.708
	Hedonism	6.059	3	2.020	1.234	.296	.003	.332
	Stimulation	1.553	3	.518	.276	.843	.001	.103
	Self-Direction	1.125	3	.375	.386	.763	.001	.127
	Universalism	1.111	3	.370	.334	.801	.001	.115
	Benevolence	.922	3	.307	.314	.815	.001	.111
	Tradition	.774	3	.258	.151	.929	.000	.078
	Conformity	6.665	3	2.222	1.701	.165	.005	.447
Security	2.572	3	.857	.730	.534	.002	.207	
Error	Achievement	3.056	3	1.019	.883	.449	.002	.245
	Power	1780.259	1100	1.618				
	Hedonism	1800.608	1100	1.637				
	Stimulation	2064.387	1100	1.877				
	Self-Direction	1069.065	1100	.972				
	Universalism	1221.446	1100	1.110				
	Benevolence	1075.501	1100	.978				
	Tradition	1881.407	1100	1.710				
	Conformity	1436.692	1100	1.306				
Security	1291.299	1100	1.174					
Achievement	1268.518	1100	1.153					

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Total	Power	7694.778	1108					
	Hedonism	27988.000	1108					
	Stimulation	21243.333	1108					
	Self-Direction	29850.250	1108					
	Universalism	28213.490	1108					
	Benevolence	30318.048	1108					
	Tradition	14031.410	1108					
	Conformity	24792.000	1108					
	Security	25148.110	1108					
Corrected Total	Achievement	26455.618	1108					
	Power	1934.525	1107					
	Hedonism	1923.130	1107					
	Stimulation	2162.463	1107					
	Self-Direction	1082.147	1107					
	Universalism	1299.735	1107					
	Benevolence	1101.335	1107					
	Tradition	1903.170	1107					
	Conformity	1459.743	1107					
Security	1312.055	1107						
Achievement	1316.047	1107						

a Computed using alpha = .05

Multiple Comparisons by Generation – Scheffe (p<.05)

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Power	Echo	Gen X	.8623	.1221	.000
		Boomer	1.1521	.1340	.000
		Mature	.9901	.2071	.000
	Gen X	Echo	-.8623	.1221	.000
		Boomer	.2898	9.027E-02	.016
		Mature	.1278	.1819	.920
	Boomer	Echo	-1.1521	.1340	.000
		Gen X	-.2898	9.027E-02	.016
		Mature	-.1621	.1901	.867
	Mature	Echo	-.9901	.2071	.000
		Gen X	-.1278	.1819	.920
		Boomer	.1621	.1901	.867
Hedonism	Echo	Gen X	.4270	.1228	.007
		Boomer	.9052	.1348	.000
		Mature	1.2988	.2083	.000
	Gen X	Echo	-.4270	.1228	.007
		Boomer	.4783	9.078E-02	.000
		Mature	.8718	.1829	.000
	Boomer	Echo	-.9052	.1348	.000
		Gen X	-.4783	9.078E-02	.000
		Mature	.3935	.1912	.238
	Mature	Echo	-1.2988	.2083	.000
		Gen X	-.8718	.1829	.000
		Boomer	-.3935	.1912	.238

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Stimulation	Echo	Gen X	-.1113	.1315	.869
		Boomer	.5126	.1443	.006
		Mature	.6733	.2230	.028
	Gen X	Echo	.1113	.1315	.869
		Boomer	.6239	9.721E-02	.000
		Mature	.7846	.1959	.001
	Boomer	Echo	-.5126	.1443	.006
		Gen X	-.6239	9.721E-02	.000
		Mature	.1607	.2047	.893
	Mature	Echo	-.6733	.2230	.028
		Gen X	-.7846	.1959	.001
		Boomer	-.1607	.2047	.893
Self-Direction	Echo	Gen X	-.2270	9.460E-02	.125
		Boomer	-.2222	.1038	.206
		Mature	-.1715	.1605	.767
	Gen X	Echo	.2270	9.460E-02	.125
		Boomer	4.767E-03	6.995E-02	1.000
		Mature	5.547E-02	.1410	.985
	Boomer	Echo	.2222	.1038	.206
		Gen X	-4.7672E-03	6.995E-02	1.000
		Mature	5.070E-02	.1473	.990
	Mature	Echo	.1715	.1605	.767
		Gen X	-5.5466E-02	.1410	.985
		Boomer	-5.0699E-02	.1473	.990
Universalism	Echo	Gen X	-.4454	.1011	.000
		Boomer	-.5979	.1110	.000
		Mature	-.9114	.1715	.000
	Gen X	Echo	.4454	.1011	.000
		Boomer	-.1525	7.477E-02	.245
		Mature	-.4660	.1507	.023
	Boomer	Echo	.5979	.1110	.000
		Gen X	.1525	7.477E-02	.245
		Mature	-.3135	.1575	.266
	Mature	Echo	.9114	.1715	.000
		Gen X	.4660	.1507	.023
		Boomer	.3135	.1575	.266
Benevolence	Echo	Gen X	-.1052	9.489E-02	.746
		Boomer	-.2544	.1041	.114
		Mature	-.4232	.1610	.075
	Gen X	Echo	.1052	9.489E-02	.746
		Boomer	-.1492	7.016E-02	.211
		Mature	-.3179	.1414	.168
	Boomer	Echo	.2544	.1041	.114
		Gen X	.1492	7.016E-02	.211
		Mature	-.1688	.1478	.728
	Mature	Echo	.4232	.1610	.075
		Gen X	.3179	.1414	.168
		Boomer	.1688	.1478	.728

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Tradition	Echo	Gen X	.3012	.1255	.125
		Boomer	.1793	.1377	.638
		Mature	-.2155	.2129	.795
	Gen X	Echo	-.3012	.1255	.125
		Boomer	-.1219	9.280E-02	.632
		Mature	-.5166	.1870	.055
	Boomer	Echo	-.1793	.1377	.638
		Gen X	.1219	9.280E-02	.632
		Mature	-.3948	.1954	.253
	Mature	Echo	.2155	.2129	.795
		Gen X	.5166	.1870	.055
		Boomer	.3948	.1954	.253
Conformity	Echo	Gen X	.2528	.1097	.151
		Boomer	.1381	.1204	.725
		Mature	-.2153	.1860	.720
	Gen X	Echo	-.2528	.1097	.151
		Boomer	-.1147	8.109E-02	.572
		Mature	-.4681	.1634	.042
	Boomer	Echo	-.1381	.1204	.725
		Gen X	.1147	8.109E-02	.572
		Mature	-.3534	.1708	.233
	Mature	Echo	.2153	.1860	.720
		Gen X	.4681	.1634	.042
		Boomer	.3534	.1708	.233
Security	Echo	Gen X	.1473	.1040	.571
		Boomer	-6.3593E-02	.1141	.958
		Mature	-.3405	.1764	.293
	Gen X	Echo	-.1473	.1040	.571
		Boomer	-.2108	7.688E-02	.058
		Mature	-.4877	.1549	.020
	Boomer	Echo	6.359E-02	.1141	.958
		Gen X	.2108	7.688E-02	.058
		Mature	-.2769	.1619	.404
	Mature	Echo	.3405	.1764	.293
		Gen X	.4877	.1549	.020
		Boomer	.2769	.1619	.404
Achievement	Echo	Gen X	.1599	.1030	.492
		Boomer	.4803	.1131	.000
		Mature	.5192	.1748	.032
	Gen X	Echo	-.1599	.1030	.492
		Boomer	.3203	7.620E-02	.001
		Mature	.3593	.1535	.141
	Boomer	Echo	-.4803	.1131	.000
		Gen X	-.3203	7.620E-02	.001
		Mature	3.895E-02	.1605	.996
	Mature	Echo	-.5192	.1748	.032
		Gen X	-.3593	.1535	.141
		Boomer	-3.8949E-02	.1605	.996

Based on observed means.

* The mean difference is significant at the .05 level.

Appendix P: SPSS Output for MANOVA 2 – General Values (Baby Boomers and Generation Xers)

Between-Subjects Factors

		Value Label	N
Gender	1	Male	302
	2	Female	622
Generation	2.00	Gen X	635
	3.00	Boomer	289
lifecycle stage	1.00	single- no kids	250
	2.00	married- no kids	286
	3.00	married or single- have kids	388

Multivariate Tests (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.960	2175.428	10.000	903.000	.000	.960	1.000
	Wilks' Lambda	.040	2175.428	10.000	903.000	.000	.960	1.000
	Hotelling's Trace	24.091	2175.428	10.000	903.000	.000	.960	1.000
	Roy's Largest Root	24.091	2175.428	10.000	903.000	.000	.960	1.000
Gender	Pillai's Trace	.049	4.642	10.000	903.000	.000	.049	1.000
	Wilks' Lambda	.951	4.642	10.000	903.000	.000	.049	1.000
	Hotelling's Trace	.051	4.642	10.000	903.000	.000	.049	1.000
	Roy's Largest Root	.051	4.642	10.000	903.000	.000	.049	1.000
Generation	Pillai's Trace	.106	10.731	10.000	903.000	.000	.106	1.000
	Wilks' Lambda	.894	10.731	10.000	903.000	.000	.106	1.000
	Hotelling's Trace	.119	10.731	10.000	903.000	.000	.106	1.000
	Roy's Largest Root	.119	10.731	10.000	903.000	.000	.106	1.000
Lifecycle	Pillai's Trace	.050	2.327	20.000	1808.000	.001	.025	.997
	Wilks' Lambda	.950	2.328	20.000	1806.000	.001	.025	.997
	Hotelling's Trace	.052	2.329	20.000	1804.000	.001	.025	.997
	Roy's Largest Root	.035	3.135	10.000	904.000	.001	.034	.987
Gender X Generation	Pillai's Trace	.019	1.777	10.000	903.000	.061	.019	.838
	Wilks' Lambda	.981	1.777	10.000	903.000	.061	.019	.838
	Hotelling's Trace	.020	1.777	10.000	903.000	.061	.019	.838
	Roy's Largest Root	.020	1.777	10.000	903.000	.061	.019	.838
Gender X Lifecycle	Pillai's Trace	.019	.883	20.000	1808.000	.610	.010	.700
	Wilks' Lambda	.981	.884	20.000	1806.000	.608	.010	.701
	Hotelling's Trace	.020	.885	20.000	1804.000	.607	.010	.702
	Roy's Largest Root	.016	1.482	10.000	904.000	.141	.016	.748
Generation X Lifecycle	Pillai's Trace	.044	2.019	20.000	1808.000	.005	.022	.990
	Wilks' Lambda	.957	2.027	20.000	1806.000	.005	.022	.990
	Hotelling's Trace	.045	2.034	20.000	1804.000	.004	.022	.990
	Roy's Largest Root	.037	3.376	10.000	904.000	.000	.036	.992
Gender X Generation X Lifecycle	Pillai's Trace	.029	1.319	20.000	1808.000	.156	.014	.900
	Wilks' Lambda	.971	1.318	20.000	1806.000	.156	.014	.900
	Hotelling's Trace	.029	1.318	20.000	1804.000	.156	.014	.900
	Roy's Largest Root	.020	1.808	10.000	904.000	.055	.020	.845

a Computed using alpha = .05 b Exact statistic

Tests of Between-Subjects Effects (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	58.116	11	5.283	3.403	.000	.039	.996
	Hedonism	80.002	11	7.273	4.395	.000	.050	1.000
	Stimulation	160.793	11	14.618	8.121	.000	.089	1.000
	Self-Direction	44.765	11	4.070	4.459	.000	.051	1.000
	Universalism	76.616	11	6.965	6.553	.000	.073	1.000
	Benevolence	24.930	11	2.266	2.385	.007	.028	.957
	Tradition	29.304	11	2.664	1.587	.097	.019	.813
	Conformity	18.951	11	1.723	1.329	.203	.016	.722
	Security	21.038	11	1.913	1.579	.100	.019	.811
Achievement	59.517	11	5.411	4.722	.000	.054	1.000	
Intercept	Power	2131.006	1	2131.006	1372.523	.000	.601	1.000
	Hedonism	10784.431	1	10784.431	6517.160	.000	.877	1.000
	Stimulation	7961.242	1	7961.242	4423.077	.000	.829	1.000
	Self-Direction	12667.512	1	12667.512	13878.827	.000	.938	1.000
	Universalism	11990.007	1	11990.007	11281.259	.000	.925	1.000
	Benevolence	12813.553	1	12813.553	13483.618	.000	.937	1.000
	Tradition	5286.527	1	5286.527	3149.157	.000	.775	1.000
	Conformity	10013.398	1	10013.398	7721.993	.000	.894	1.000
	Security	10473.794	1	10473.794	8645.183	.000	.905	1.000
Achievement	10104.305	1	10104.305	8818.294	.000	.906	1.000	
Gender	Power	7.392	1	7.392	4.761	.029	.005	.587
	Hedonism	2.556E-02	1	2.556E-02	.015	.901	.000	.052
	Stimulation	8.296E-03	1	8.296E-03	.005	.946	.000	.051
	Self-Direction	4.093	1	4.093	4.484	.034	.005	.562
	Universalism	14.814	1	14.814	13.939	.000	.015	.962
	Benevolence	11.535	1	11.535	12.139	.001	.013	.936
	Tradition	.463	1	.463	.276	.600	.000	.082
	Conformity	.725	1	.725	.559	.455	.001	.116
	Security	5.080E-02	1	5.080E-02	.042	.838	.000	.055
Achievement	15.708	1	15.708	13.709	.000	.015	.959	
Generation	Power	30.204	1	30.204	19.453	.000	.021	.993
	Hedonism	29.163	1	29.163	17.624	.000	.019	.987
	Stimulation	45.622	1	45.622	25.346	.000	.027	.999
	Self-Direction	8.215E-02	1	8.215E-02	.090	.764	.000	.060
	Universalism	7.077	1	7.077	6.659	.010	.007	.732
	Benevolence	2.666	1	2.666	2.806	.094	.003	.387
	Tradition	2.850	1	2.850	1.698	.193	.002	.256
	Conformity	6.854E-04	1	6.854E-04	.001	.982	.000	.050
	Security	2.427	1	2.427	2.003	.157	.002	.293
Achievement	34.838	1	34.838	30.404	.000	.032	1.000	
Lifecycle	Power	4.869	2	2.434	1.568	.209	.003	.334
	Hedonism	7.001	2	3.500	2.115	.121	.005	.435
	Stimulation	12.858	2	6.429	3.572	.028	.008	.663
	Self-Direction	9.286	2	4.643	5.087	.006	.011	.821
	Universalism	11.679	2	5.839	5.494	.004	.012	.851
	Benevolence	.360	2	.180	.189	.827	.000	.080
	Tradition	11.964	2	5.982	3.564	.029	.008	.662
	Conformity	2.505	2	1.252	.966	.381	.002	.218
	Security	3.821	2	1.911	1.577	.207	.003	.335
Achievement	3.525	2	1.763	1.538	.215	.003	.328	

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Gender X Generation	Power	2.653	1	2.653	1.708	.192	.002	.257
	Hedonism	6.268E-02	1	6.268E-02	.038	.846	.000	.054
	Stimulation	7.162E-03	1	7.162E-03	.004	.950	.000	.050
	Self-Direction	6.782E-03	1	6.782E-03	.007	.931	.000	.051
	Universalism	1.931E-03	1	1.931E-03	.002	.966	.000	.050
	Benevolence	.667	1	.667	.702	.402	.001	.133
	Tradition	2.169	1	2.169	1.292	.256	.001	.206
	Conformity	2.701	1	2.701	2.083	.149	.002	.302
	Security	1.168	1	1.168	.964	.326	.001	.165
Achievement	6.222	1	6.222	5.430	.020	.006	.644	
Gender X Lifecycle	Power	5.041	2	2.520	1.623	.198	.004	.344
	Hedonism	3.891	2	1.946	1.176	.309	.003	.258
	Stimulation	3.516	2	1.758	.977	.377	.002	.220
	Self-Direction	2.146	2	1.073	1.175	.309	.003	.258
	Universalism	.220	2	.110	.103	.902	.000	.066
	Benevolence	.360	2	.180	.189	.827	.000	.080
	Tradition	6.862	2	3.431	2.044	.130	.004	.422
	Conformity	1.214	2	.607	.468	.626	.001	.127
	Security	.866	2	.433	.357	.700	.001	.108
Achievement	1.566	2	.783	.684	.505	.001	.166	
Generation X Lifecycle	Power	5.947	2	2.974	1.915	.148	.004	.399
	Hedonism	11.893	2	5.946	3.593	.028	.008	.666
	Stimulation	18.177	2	9.088	5.049	.007	.011	.818
	Self-Direction	8.073	2	4.037	4.423	.012	.010	.762
	Universalism	1.918	2	.959	.902	.406	.002	.206
	Benevolence	2.971	2	1.485	1.563	.210	.003	.333
	Tradition	1.870	2	.935	.557	.573	.001	.143
	Conformity	1.259	2	.630	.486	.615	.001	.130
	Security	.549	2	.274	.226	.797	.000	.086
Achievement	23.581	2	11.791	10.290	.000	.022	.987	
Gender X Generation X Lifecycle	Power	1.485	2	.743	.478	.620	.001	.129
	Hedonism	1.780	2	.890	.538	.584	.001	.139
	Stimulation	1.588	2	.794	.441	.643	.001	.122
	Self-Direction	4.746	2	2.373	2.600	.075	.006	.519
	Universalism	10.434	2	5.217	4.908	.008	.011	.806
	Benevolence	2.131	2	1.065	1.121	.326	.002	.248
	Tradition	.871	2	.435	.259	.772	.001	.091
	Conformity	2.413	2	1.206	.930	.395	.002	.212
	Security	.317	2	.158	.131	.877	.000	.070
Achievement	3.124	2	1.562	1.363	.256	.003	.294	
Error	Power	1415.989	912	1.553				
	Hedonism	1509.154	912	1.655				
	Stimulation	1641.539	912	1.800				
	Self-Direction	832.403	912	.913				
	Universalism	969.297	912	1.063				
	Benevolence	866.678	912	.950				
	Tradition	1530.985	912	1.679				
	Conformity	1182.625	912	1.297				
	Security	1104.904	912	1.212				
Achievement	1045.001	912	1.146					

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Total	Power	5821.889	924					
	Hedonism	23025.250	924					
	Stimulation	17855.111	924					
	Self-Direction	25144.043	924					
	Universalism	23840.382	924					
	Benevolence	25303.730	924					
	Tradition	11347.033	924					
	Conformity	20268.250	924					
	Security	20749.148	924					
Corrected Total	Achievement	21907.958	924					
	Power	1474.105	923					
	Hedonism	1589.157	923					
	Stimulation	1802.331	923					
	Self-Direction	877.167	923					
	Universalism	1045.913	923					
	Benevolence	891.608	923					
	Tradition	1560.289	923					
	Conformity	1201.576	923					
Security	1125.942	923						
Achievement	1104.518	923						

a. Computed using alpha = .05

Appendix Q: SPSS Output of Pairwise Comparisons of Lifecycle Stages for Generation Xers and Baby Boomers

Multiple Comparisons: Generation Xers by Lifecycle – Scheffe (p<.05)

Dependent Variable	(I) lifecycle stage	(J) lifecycle stage	Mean Difference (I-J)	Std. Error	Sig.
Power	single- no kids	married- no kids	.1484	.1233	.485
		married or single- have kids	3.488E-02	.1271	.963
	married- no kids	single- no kids	-.1484	.1233	.485
		married or single- have kids	-.1135	.1263	.668
	married or single- have kids	single- no kids	-3.4883E-02	.1271	.963
		married- no kids	.1135	.1263	.668
Hedonism	single- no kids	married- no kids	.1732	.1247	.382
		married or single- have kids	.4214	.1285	.005
	married- no kids	single- no kids	-.1732	.1247	.382
		married or single- have kids	.2482	.1277	.152
	married or single- have kids	single- no kids	-.4214	.1285	.005
		married- no kids	-.2482	.1277	.152
Stimulation	single- no kids	married- no kids	.4323	.1287	.004
		married or single- have kids	.8390	.1326	.000
	married- no kids	single- no kids	-.4323	.1287	.004
		married or single- have kids	.4066	.1318	.009
	married or single- have kids	single- no kids	-.8390	.1326	.000
		married- no kids	-.4066	.1318	.009
Self-Direction	single- no kids	married- no kids	.2431	9.258E-02	.032
		married or single- have kids	.5601	9.543E-02	.000
	married- no kids	single- no kids	-.2431	9.258E-02	.032
		married or single- have kids	.3170	9.481E-02	.004
	married or single- have kids	single- no kids	-.5601	9.543E-02	.000
		married- no kids	-.3170	9.481E-02	.004
Universalism	single- no kids	married- no kids	.2110	.1010	.113
		married or single- have kids	.5340	.1041	.000
	married- no kids	single- no kids	-.2110	.1010	.113
		married or single- have kids	.3230	.1034	.008
	married or single- have kids	single- no kids	-.5340	.1041	.000
		married- no kids	-.3230	.1034	.008

Dependent Variable	(I) lifecycle stage	(J) lifecycle stage	Mean Difference (I-J)	Std. Error	Sig.
Benevolence	single- no kids	married- no kids	.1696	9.429E-02	.199
		married or single- have kids	.1518	9.719E-02	.296
	married- no kids	single- no kids	-.1696	9.429E-02	.199
		married or single- have kids	-1.7789E-02	9.656E-02	.983
	married or single- have kids	single- no kids	-.1518	9.719E-02	.296
		married- no kids	1.779E-02	9.656E-02	.983
Tradition	single- no kids	married- no kids	.2632	.1247	.109
		married or single- have kids	-9.5662E-02	.1285	.758
	married- no kids	single- no kids	-.2632	.1247	.109
		married or single- have kids	-.3588	.1277	.020
	married or single- have kids	single- no kids	9.566E-02	.1285	.758
		married- no kids	.3588	.1277	.020
Conformity	single- no kids	married- no kids	.1146	.1062	.559
		married or single- have kids	-4.2577E-02	.1095	.927
	married- no kids	single- no kids	-.1146	.1062	.559
		married or single- have kids	-.1572	.1088	.353
	married or single- have kids	single- no kids	4.258E-02	.1095	.927
		married- no kids	.1572	.1088	.353
Security	single- no kids	married- no kids	7.833E-03	.1069	.997
		married or single- have kids	-.2053	.1102	.177
	married- no kids	single- no kids	-7.8328E-03	.1069	.997
		married or single- have kids	-.2132	.1094	.151
	married or single- have kids	single- no kids	.2053	.1102	.177
		married- no kids	.2132	.1094	.151
Achievement	single- no kids	married- no kids	.1373	.1013	.400
		married or single- have kids	.3332	.1044	.006
	married- no kids	single- no kids	-.1373	.1013	.400
		married or single- have kids	.1960	.1037	.169
	married or single- have kids	single- no kids	-.3332	.1044	.006
		married- no kids	-.1960	.1037	.169

Based on observed means.

* The mean difference is significant at the .05 level.

Multiple Comparisons: Baby Boomers by Lifecycle – Scheffe (p<.05)

Dependent Variable	(I) lifecycle stage	(J) lifecycle stage	Mean Difference (I-J)	Std. Error	Sig.
Power	single- no kids	married- no kids	-.2068	.2424	.695
		married or single- have kids	-.5529	.2126	.035
	married- no kids	single- no kids	.2068	.2424	.695
		married or single- have kids	-.3461	.1650	.113
	married or single- have kids	single- no kids	.5529	.2126	.035
		married- no kids	.3461	.1650	.113
Hedonism	single- no kids	married- no kids	-.5813	.2642	.091
		married or single- have kids	-.2764	.2317	.492
	married- no kids	single- no kids	.5813	.2642	.091
		married or single- have kids	.3049	.1798	.239
	married or single- have kids	single- no kids	.2764	.2317	.492
		married- no kids	-.3049	.1798	.239
Stimulation	single- no kids	married- no kids	-.3591	.2826	.447
		married or single- have kids	-.1231	.2478	.884
	married- no kids	single- no kids	.3591	.2826	.447
		married or single- have kids	.2359	.1923	.472
	married or single- have kids	single- no kids	.1231	.2478	.884
		married- no kids	-.2359	.1923	.472
Self-Direction	single- no kids	married- no kids	-.1906	.1963	.625
		married or single- have kids	3.141E-02	.1722	.983
	married- no kids	single- no kids	.1906	.1963	.625
		married or single- have kids	.2220	.1336	.253
	married or single- have kids	single- no kids	-3.1414E-02	.1722	.983
		married- no kids	-.2220	.1336	.253
Universalism	single- no kids	married- no kids	4.458E-02	.2063	.977
		married or single- have kids	.2160	.1809	.491
	married- no kids	single- no kids	-4.4577E-02	.2063	.977
		married or single- have kids	.1715	.1404	.475
	married or single- have kids	single- no kids	-.2160	.1809	.491
		married- no kids	-.1715	.1404	.475
Benevolence	single- no kids	married- no kids	-6.7371E-02	.2012	.946
		married or single- have kids	3.828E-02	.1765	.977
	married- no kids	single- no kids	6.737E-02	.2012	.946
		married or single- have kids	.1057	.1370	.743
	married or single- have kids	single- no kids	-3.8281E-02	.1765	.977
		married- no kids	-.1057	.1370	.743

Dependent Variable	(I) lifecycle stage	(J) lifecycle stage	Mean Difference (I-J)	Std. Error	Sig.
Tradition	single- no kids	married- no kids	.3539	.2707	.427
		married or single- have kids	.1084	.2375	.901
	married- no kids	single- no kids	-.3539	.2707	.427
		married or single- have kids	-.2455	.1843	.413
	married or single- have kids	single- no kids	-.1084	.2375	.901
		married- no kids	.2455	.1843	.413
Conformity	single- no kids	married- no kids	2.076E-02	.2540	.997
		married or single- have kids	-.1573	.2228	.780
	married- no kids	single- no kids	-2.0757E-02	.2540	.997
		married or single- have kids	-.1780	.1729	.589
	married or single- have kids	single- no kids	.1573	.2228	.780
		married- no kids	.1780	.1729	.589
Security	single- no kids	married- no kids	5.790E-03	.2252	1.000
		married or single- have kids	-.1093	.1975	.858
	married- no kids	single- no kids	-5.7904E-03	.2252	1.000
		married or single- have kids	-.1151	.1532	.755
	married or single- have kids	single- no kids	.1093	.1975	.858
		married- no kids	.1151	.1532	.755
Achievement	single- no kids	married- no kids	-.4074	.2321	.216
		married or single- have kids	-.5982	.2036	.014
	married- no kids	single- no kids	.4074	.2321	.216
		married or single- have kids	-.1908	.1580	.483
	married or single- have kids	single- no kids	.5982	.2036	.014
		married- no kids	.1908	.1580	.483

Based on observed means.

* The mean difference is significant at the .05 level.

a Generation = Boomer

Appendix R: MANOVAS for Male and Female Sub-Samples – Generation Xers and Baby Boomers (General Values)

1) MANOVA for Male Generation Xers and Baby Boomers

Between-Subjects Factors^a

	Value	Label	N
Generation	2.00	Gen X	199
	3.00	Boomer	103
lifecycle stage	1.00	single- no kids	76
	2.00	married- no kids	88
	3.00	married or single- have kids	138

a. Gender = Male

Multivariate Tests – Male Sub-Sample (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.963	738.066	10.000	287.000	.000	.963	1.000
	Wilks' Lambda	.037	738.066	10.000	287.000	.000	.963	1.000
	Hotelling's Trace	25.717	738.066	10.000	287.000	.000	.963	1.000
	Roy's Largest Root	25.717	738.066	10.000	287.000	.000	.963	1.000
Generation	Pillai's Trace	.171	5.907	10.000	287.000	.000	.171	1.000
	Wilks' Lambda	.829	5.907	10.000	287.000	.000	.171	1.000
	Hotelling's Trace	.206	5.907	10.000	287.000	.000	.171	1.000
	Roy's Largest Root	.206	5.907	10.000	287.000	.000	.171	1.000
Lifecycle	Pillai's Trace	.083	1.244	20.000	576.000	.212	.041	.869
	Wilks' Lambda	.919	1.242	20.000	574.000	.213	.041	.869
	Hotelling's Trace	.087	1.240	20.000	572.000	.215	.042	.868
	Roy's Largest Root	.057	1.630	10.000	288.000	.098	.054	.786
Generation X Lifecycle	Pillai's Trace	.117	1.790	20.000	576.000	.019	.059	.975
	Wilks' Lambda	.886	1.793	20.000	574.000	.018	.059	.975
	Hotelling's Trace	.126	1.796	20.000	572.000	.018	.059	.975
	Roy's Largest Root	.089	2.574	10.000	288.000	.005	.082	.955

a Computed using alpha = .05

Tests of Between-Subjects Effects – Male Sub-Sample (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	29.847	5	5.969	3.744	.003	.059	.932
	Hedonism	15.279	5	3.056	1.656	.145	.027	.572
	Stimulation	32.676	5	6.535	3.767	.003	.060	.934
	Self-Direction	14.736	5	2.947	3.144	.009	.050	.877
	Universalism	13.806	5	2.761	2.408	.037	.039	.761
	Benevolence	6.285	5	1.257	1.237	.292	.020	.438
	Tradition	8.727	5	1.745	1.195	.312	.020	.424
	Conformity	6.992	5	1.398	1.038	.395	.017	.370
	Security	3.673	5	.735	.615	.688	.010	.224
Achievement	31.822	5	6.364	5.058	.000	.079	.984	
Intercept	Power	895.965	1	895.965	562.002	.000	.655	1.000
	Hedonism	4031.407	1	4031.407	2184.746	.000	.881	1.000
	Stimulation	2991.332	1	2991.332	1724.388	.000	.853	1.000
	Self-Direction	4580.720	1	4580.720	4885.798	.000	.943	1.000
	Universalism	4185.393	1	4185.393	3649.448	.000	.925	1.000
	Benevolence	4520.712	1	4520.712	4449.137	.000	.938	1.000
	Tradition	2019.551	1	2019.551	1382.810	.000	.824	1.000
	Conformity	3691.096	1	3691.096	2740.948	.000	.903	1.000
	Security	3910.088	1	3910.088	3273.157	.000	.917	1.000
Achievement	3495.936	1	3495.936	2778.491	.000	.904	1.000	
Generation	Power	19.033	1	19.033	11.938	.001	.039	.931
	Hedonism	9.945	1	9.945	5.389	.021	.018	.638
	Stimulation	16.681	1	16.681	9.616	.002	.031	.871
	Self-Direction	1.565E-02	1	1.565E-02	.017	.897	.000	.052
	Universalism	2.742	1	2.742	2.391	.123	.008	.338
	Benevolence	.250	1	.250	.246	.620	.001	.078
	Tradition	3.747	1	3.747	2.565	.110	.009	.358
	Conformity	.981	1	.981	.728	.394	.002	.136
	Security	8.532E-02	1	8.532E-02	.071	.789	.000	.058
Achievement	26.438	1	26.438	21.012	.000	.066	.995	
Lifecycle	Power	1.457	2	.729	.457	.634	.003	.124
	Hedonism	2.546	2	1.273	.690	.502	.005	.166
	Stimulation	1.895	2	.947	.546	.580	.004	.140
	Self-Direction	3.305	2	1.653	1.763	.173	.012	.368
	Universalism	3.407	2	1.704	1.485	.228	.010	.316
	Benevolence	.197	2	9.843E-02	.097	.908	.001	.065
	Tradition	5.795	2	2.897	1.984	.139	.013	.409
	Conformity	.383	2	.192	.142	.867	.001	.072
	Security	1.908	2	.954	.798	.451	.005	.186
Achievement	3.395	2	1.697	1.349	.261	.009	.290	
Generation X Lifecycle	Power	1.619	2	.810	.508	.602	.003	.133
	Hedonism	6.334	2	3.167	1.716	.182	.011	.359
	Stimulation	7.195	2	3.598	2.074	.128	.014	.425
	Self-Direction	7.825	2	3.912	4.173	.016	.027	.732
	Universalism	6.107	2	3.054	2.663	.071	.018	.526
	Benevolence	3.780	2	1.890	1.860	.157	.012	.386
	Tradition	1.957	2	.979	.670	.512	.005	.162
	Conformity	2.578	2	1.289	.957	.385	.006	.216
	Security	.501	2	.250	.210	.811	.001	.083
Achievement	15.976	2	7.988	6.348	.002	.041	.898	

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Error	Power	471.894	296	1.594				
	Hedonism	546.195	296	1.845				
	Stimulation	513.477	296	1.735				
	Self-Direction	277.517	296	.938				
	Universalism	339.470	296	1.147				
	Benevolence	300.762	296	1.016				
	Tradition	432.299	296	1.460				
	Conformity	398.608	296	1.347				
	Security	353.599	296	1.195				
Total	Achievement	372.431	296	1.258				
	Power	2130.444	302					
	Hedonism	7533.000	302					
	Stimulation	5772.556	302					
	Self-Direction	7890.330	302					
	Universalism	7058.731	302					
	Benevolence	7774.275	302					
	Tradition	3591.698	302					
	Conformity	6621.257	302					
Corrected Total	Security	6822.792	302					
	Achievement	6738.424	302					
	Power	501.741	301					
	Hedonism	561.474	301					
	Stimulation	546.153	301					
	Self-Direction	292.254	301					
	Universalism	353.275	301					
	Benevolence	307.047	301					
	Tradition	441.026	301					
Conformity	405.600	301						
Security	357.273	301						
Achievement	404.253	301						

a. Computed using alpha = .05 | Gender = Male

2) MANOVA For Female Generation Xers and Baby Boomers

Between-Subjects Factor^s

	Value	Label	N
Generation	2.00	Gen X	436
	3.00	Boomer	186
lifecycle stage	1.00	single- no kids	174
	2.00	married- no kids	198
	3.00	married or single- have kids	250

a. Gender = Female

Multivariate Tests – Female Sub-Sample (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.967	1755.185	10.000	607.000	.000	.967	1.000
	Wilks' Lambda	.033	1755.185	10.000	607.000	.000	.967	1.000
	Hotelling's Trace	28.916	1755.185	10.000	607.000	.000	.967	1.000
	Roy's Largest Root	28.916	1755.185	10.000	607.000	.000	.967	1.000
Generation	Pillai's Trace	.102	6.908	10.000	607.000	.000	.102	1.000
	Wilks' Lambda	.898	6.908	10.000	607.000	.000	.102	1.000
	Hotelling's Trace	.114	6.908	10.000	607.000	.000	.102	1.000
	Roy's Largest Root	.114	6.908	10.000	607.000	.000	.102	1.000
Lifecycle	Pillai's Trace	.074	2.335	20.000	1216.000	.001	.037	.997
	Wilks' Lambda	.927	2.352	20.000	1214.000	.001	.037	.997
	Hotelling's Trace	.078	2.369	20.000	1212.000	.001	.038	.997
	Roy's Largest Root	.066	4.004	10.000	608.000	.000	.062	.998
Generation X Lifecycle	Pillai's Trace	.044	1.382	20.000	1216.000	.121	.022	.915
	Wilks' Lambda	.956	1.386	20.000	1214.000	.119	.022	.916
	Hotelling's Trace	.046	1.390	20.000	1212.000	.117	.022	.917
	Roy's Largest Root	.038	2.286	10.000	608.000	.012	.036	.930

a Computed using alpha = .05

Tests of Between-Subjects Effects – Female Sub-Sample (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	17.753	5	3.551	2.317	.042	.018	.747
	Hedonism	64.660	5	12.932	8.272	.000	.063	1.000
	Stimulation	128.087	5	25.617	13.989	.000	.102	1.000
	Self-Direction	24.714	5	4.943	5.487	.000	.043	.991
	Universalism	33.692	5	6.738	6.590	.000	.051	.998
	Benevolence	6.054	5	1.211	1.318	.255	.011	.469
	Tradition	20.306	5	4.061	2.277	.046	.018	.738
	Conformity	11.944	5	2.389	1.877	.096	.015	.640
	Security	17.210	5	3.442	2.822	.016	.022	.838
Achievement	15.451	5	3.090	2.830	.015	.022	.839	
Intercept	Power	1415.750	1	1415.750	923.744	.000	.600	1.000
	Hedonism	8114.504	1	8114.504	5190.803	.000	.894	1.000
	Stimulation	5959.672	1	5959.672	3254.395	.000	.841	1.000
	Self-Direction	9846.785	1	9846.785	10931.302	.000	.947	1.000
	Universalism	9637.292	1	9637.292	9425.716	.000	.939	1.000
	Benevolence	10197.088	1	10197.088	11099.530	.000	.947	1.000
	Tradition	3891.673	1	3891.673	2181.942	.000	.780	1.000
	Conformity	7639.605	1	7639.605	6002.421	.000	.907	1.000
	Security	7891.209	1	7891.209	6470.056	.000	.913	1.000
Achievement	8188.876	1	8188.876	7500.111	.000	.924	1.000	
Generation	Power	11.218	1	11.218	7.319	.007	.012	.771
	Hedonism	23.951	1	23.951	15.322	.000	.024	.974
	Stimulation	35.085	1	35.085	19.159	.000	.030	.992
	Self-Direction	.102	1	.102	.113	.736	.000	.063
	Universalism	5.135	1	5.135	5.022	.025	.008	.609
	Benevolence	4.501	1	4.501	4.900	.027	.008	.599
	Tradition	3.476E-02	1	3.476E-02	.019	.889	.000	.052
	Conformity	2.091	1	2.091	1.643	.200	.003	.249
	Security	5.223	1	5.223	4.283	.039	.007	.542
Achievement	8.712	1	8.712	7.979	.005	.013	.805	

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Lifecycle	Power	12.165	2	6.083	3.969	.019	.013	.712
	Hedonism	10.073	2	5.036	3.222	.041	.010	.615
	Stimulation	20.618	2	10.309	5.629	.004	.018	.859
	Self-Direction	11.068	2	5.534	6.143	.002	.020	.889
	Universalism	11.273	2	5.636	5.513	.004	.018	.852
	Benevolence	.773	2	.386	.421	.657	.001	.118
	Tradition	14.434	2	7.217	4.046	.018	.013	.721
	Conformity	4.464	2	2.232	1.753	.174	.006	.368
Generation X Lifecycle	Security	3.483	2	1.741	1.428	.241	.005	.306
	Achievement	.569	2	.285	.261	.771	.001	.091
	Power	8.668	2	4.334	2.828	.060	.009	.555
	Hedonism	8.499	2	4.249	2.718	.067	.009	.538
	Stimulation	15.723	2	7.862	4.293	.014	.014	.748
	Self-Direction	3.274	2	1.637	1.817	.163	.006	.380
	Universalism	6.646	2	3.323	3.250	.039	.010	.619
	Benevolence	.149	2	7.458E-02	.081	.922	.000	.062
Error	Tradition	.152	2	7.578E-02	.042	.958	.000	.056
	Conformity	.153	2	7.670E-02	.060	.942	.000	.059
	Security	.364	2	.182	.149	.861	.000	.073
	Achievement	7.625	2	3.813	3.492	.031	.011	.652
	Power	944.095	616	1.533				
	Hedonism	962.960	616	1.563				
	Stimulation	1128.061	616	1.831				
	Self-Direction	554.885	616	.901				
Total	Universalism	629.827	616	1.022				
	Benevolence	565.916	616	.919				
	Tradition	1098.686	616	1.784				
	Conformity	784.016	616	1.273				
	Security	751.305	616	1.220				
	Achievement	672.570	616	1.092				
	Power	3691.444	622					
	Hedonism	15492.250	622					
Corrected Total	Stimulation	12082.556	622					
	Self-Direction	17253.713	622					
	Universalism	16781.651	622					
	Benevolence	17529.455	622					
	Tradition	7755.335	622					
	Conformity	13646.993	622					
	Security	13926.355	622					
	Achievement	15169.535	622					
Corrected Total	Power	961.848	621					
	Hedonism	1027.619	621					
	Stimulation	1256.149	621					
	Self-Direction	579.600	621					
	Universalism	663.519	621					
	Benevolence	571.971	621					
	Tradition	1118.993	621					
	Conformity	795.960	621					
Corrected Total	Security	768.515	621					
	Achievement	688.021	621					

a Computed using alpha = .05

Appendix S: One-Way MANOVAs (Generation) for Male Respondents in Each Life-cycle Stage

1) Male Respondents, Single with no Children

Between-Subjects Factors^a

	Value	Label	N
Generation	2.00	Gen X	66
	3.00	Boomer	10

a. Gender = Male, lifecycle stage = single- no kids

Multivariate Tests (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.954	135.621	10.000	65.000	.000	.954	1.000
	Wilks' Lambda	.046	135.621	10.000	65.000	.000	.954	1.000
	Hotelling's Trace	20.865	135.621	10.000	65.000	.000	.954	1.000
	Roy's Largest Root	20.865	135.621	10.000	65.000	.000	.954	1.000
Generation	Pillai's Trace	.322	3.092	10.000	65.000	.003	.322	.970
	Wilks' Lambda	.678	3.092	10.000	65.000	.003	.322	.970
	Hotelling's Trace	.476	3.092	10.000	65.000	.003	.322	.970
	Roy's Largest Root	.476	3.092	10.000	65.000	.003	.322	.970

a Computed using alpha = .05

Tests of Between-Subjects Effects (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	4.441	1	4.441	2.490	.119	.033	.344
	Hedonism	9.219	1	9.219	4.596	.035	.058	.562
	Stimulation	13.822	1	13.822	8.680	.004	.105	.828
	Self-Direction	3.594	1	3.594	3.598	.062	.046	.465
	Universalism	8.208E-04	1	8.208E-04	.001	.979	.000	.050
	Benevolence	.993	1	.993	1.143	.288	.015	.184
	Tradition	2.552	1	2.552	1.481	.227	.020	.225
	Conformity	2.456	1	2.456	1.831	.180	.024	.267
	Security	1.519E-02	1	1.519E-02	.013	.910	.000	.051
Intercept	Achievement	22.253	1	22.253	20.285	.000	.215	.994
	Power	187.652	1	187.652	105.220	.000	.587	1.000
	Hedonism	708.166	1	708.166	353.035	.000	.827	1.000
	Stimulation	564.384	1	564.384	354.408	.000	.827	1.000
	Self-Direction	855.156	1	855.156	855.958	.000	.920	1.000
	Universalism	835.687	1	835.687	687.196	.000	.903	1.000
	Benevolence	850.827	1	850.827	979.572	.000	.930	1.000
	Tradition	452.428	1	452.428	262.604	.000	.780	1.000
	Conformity	716.269	1	716.269	533.879	.000	.878	1.000
Security	754.626	1	754.626	634.124	.000	.895	1.000	
Achievement	598.364	1	598.364	545.459	.000	.881	1.000	

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Generation	Power	4.441	1	4.441	2.490	.119	.033	.344
	Hedonism	9.219	1	9.219	4.596	.035	.058	.562
	Stimulation	13.822	1	13.822	8.680	.004	.105	.828
	Self-Direction	3.594	1	3.594	3.598	.062	.046	.465
	Universalism	8.208E-04	1	8.208E-04	.001	.979	.000	.050
	Benevolence	.993	1	.993	1.143	.288	.015	.184
	Tradition	2.552	1	2.552	1.481	.227	.020	.225
	Conformity	2.456	1	2.456	1.831	.180	.024	.267
	Security	1.519E-02	1	1.519E-02	.013	.910	.000	.051
Achievement	22.253	1	22.253	20.285	.000	.215	.994	
Error	Power	131.974	74	1.783				
	Hedonism	148.439	74	2.006				
	Stimulation	117.843	74	1.592				
	Self-Direction	73.931	74	.999				
	Universalism	89.990	74	1.216				
	Benevolence	64.274	74	.869				
	Tradition	127.491	74	1.723				
	Conformity	99.281	74	1.342				
	Security	88.062	74	1.190				
Achievement	81.177	74	1.097					
Total	Power	645.333	76					
	Hedonism	1978.500	76					
	Stimulation	1667.667	76					
	Self-Direction	2131.525	76					
	Universalism	1921.045	76					
	Benevolence	2021.680	76					
	Tradition	1013.370	76					
	Conformity	1807.000	76					
	Security	1750.040	76					
Achievement	1811.063	76						
Corrected Total	Power	136.415	75					
	Hedonism	157.658	75					
	Stimulation	131.665	75					
	Self-Direction	77.525	75					
	Universalism	89.991	75					
	Benevolence	65.267	75					
	Tradition	130.044	75					
	Conformity	101.737	75					
	Security	88.077	75					
Achievement	103.430	75						

a Computed using alpha = .05

2) Male Respondents, Married with no Children

Between-Subjects Factors^a

	Value	Label	N
Generation	2.00	Gen X	60
	3.00	Boomer	28

a. Gender = Male, lifecycle stage = married- no kids

Multivariate Tests (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.979	357.011	10.000	77.000	.000	.979	1.000
	Wilks' Lambda	.021	357.011	10.000	77.000	.000	.979	1.000
	Hotelling's Trace	46.365	357.011	10.000	77.000	.000	.979	1.000
	Roy's Largest Root	46.365	357.011	10.000	77.000	.000	.979	1.000
Generation	Pillai's Trace	.287	3.106	10.000	77.000	.002	.287	.973
	Wilks' Lambda	.713	3.106	10.000	77.000	.002	.287	.973
	Hotelling's Trace	.403	3.106	10.000	77.000	.002	.287	.973
	Roy's Largest Root	.403	3.106	10.000	77.000	.002	.287	.973

a Computed using alpha = .05

Tests of Between-Subjects Effects (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	11.643	1	11.643	7.414	.008	.079	.768
	Hedonism	1.082E-04	1	1.082E-04	.000	.994	.000	.050
	Stimulation	.923	1	.923	.513	.476	.006	.109
	Self-Direction	4.725	1	4.725	6.914	.010	.074	.739
	Universalism	9.530	1	9.530	7.850	.006	.084	.791
	Benevolence	3.789	1	3.789	3.461	.066	.039	.452
	Tradition	1.431	1	1.431	.890	.348	.010	.154
	Conformity	1.082E-02	1	1.082E-02	.008	.931	.000	.051
	Security	.610	1	.610	.401	.528	.005	.096
Achievement	6.364	1	6.364	4.920	.029	.054	.592	
Intercept	Power	334.477	1	334.477	212.981	.000	.712	1.000
	Hedonism	1789.216	1	1789.216	858.316	.000	.909	1.000
	Stimulation	1312.408	1	1312.408	730.052	.000	.895	1.000
	Self-Direction	2026.338	1	2026.338	2965.097	.000	.972	1.000
	Universalism	1774.724	1	1774.724	1461.902	.000	.944	1.000
	Benevolence	1916.279	1	1916.279	1750.763	.000	.953	1.000
	Tradition	743.468	1	743.468	462.259	.000	.843	1.000
	Conformity	1497.662	1	1497.662	1058.518	.000	.925	1.000
	Security	1548.778	1	1548.778	1019.955	.000	.922	1.000
Achievement	1519.887	1	1519.887	1175.081	.000	.932	1.000	

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Generation	Power	11.643	1	11.643	7.414	.008	.079	.768
	Hedonism	1.082E-04	1	1.082E-04	.000	.994	.000	.050
	Stimulation	.923	1	.923	.513	.476	.006	.109
	Self-Direction	4.725	1	4.725	6.914	.010	.074	.739
	Universalism	9.530	1	9.530	7.850	.006	.084	.791
	Benevolence	3.789	1	3.789	3.461	.066	.039	.452
	Tradition	1.431	1	1.431	.890	.348	.010	.154
	Conformity	1.082E-02	1	1.082E-02	.008	.931	.000	.051
	Security	.610	1	.610	.401	.528	.005	.096
Achievement	6.364	1	6.364	4.920	.029	.054	.592	
Error	Power	135.059	86	1.570				
	Hedonism	179.273	86	2.085				
	Stimulation	154.601	86	1.798				
	Self-Direction	58.772	86	.683				
	Universalism	104.402	86	1.214				
	Benevolence	94.130	86	1.095				
	Tradition	138.317	86	1.608				
	Conformity	121.679	86	1.415				
	Security	130.589	86	1.518				
Achievement	111.235	86	1.293					
Total	Power	586.222	88					
	Hedonism	2241.500	88					
	Stimulation	1697.222	88					
	Self-Direction	2317.323	88					
	Universalism	2051.547	88					
	Benevolence	2235.370	88					
	Tradition	969.385	88					
	Conformity	1844.194	88					
	Security	1890.323	88					
Achievement	1952.486	88						
Corrected Total	Power	146.702	87					
	Hedonism	179.273	87					
	Stimulation	155.524	87					
	Self-Direction	63.497	87					
	Universalism	113.933	87					
	Benevolence	97.919	87					
	Tradition	139.748	87					
	Conformity	121.689	87					
	Security	131.199	87					
Achievement	117.599	87						

a Computed using alpha = .05

3) Male Respondents, Married or Single with Children

Between-Subjects Factors^a

	Value Label	N
Generation 2.00	Gen X	73
3.00	Boomer	65

a. Gender = Male, lifecycle stage = married or single- have kids

Multivariate Tests (General Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.978	560.726	10.000	127.000	.000	.978	1.000
	Wilks' Lambda	.022	560.726	10.000	127.000	.000	.978	1.000
	Hotelling's Trace	44.152	560.726	10.000	127.000	.000	.978	1.000
	Roy's Largest Root	44.152	560.726	10.000	127.000	.000	.978	1.000
Generation	Pillai's Trace	.103	1.456	10.000	127.000	.164	.103	.707
	Wilks' Lambda	.897	1.456	10.000	127.000	.164	.103	.707
	Hotelling's Trace	.115	1.456	10.000	127.000	.164	.103	.707
	Roy's Largest Root	.115	1.456	10.000	127.000	.164	.103	.707

a Computed using alpha = .05

Tests of Between-Subjects Effects (General Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Power	6.607	1	6.607	4.386	.038	.031	.548
	Hedonism	4.597	1	4.597	2.862	.093	.021	.390
	Stimulation	3.734	1	3.734	2.107	.149	.015	.302
	Self-Direction	1.393	1	1.393	1.308	.255	.010	.206
	Universalism	4.819E-02	1	4.819E-02	.045	.832	.000	.055
	Benevolence	.449	1	.449	.429	.514	.003	.100
	Tradition	6.173E-02	1	6.173E-02	.050	.823	.000	.056
	Conformity	.163	1	.163	.125	.724	.001	.064
	Security	1.860E-03	1	1.860E-03	.002	.966	.000	.050
Achievement	.356	1	.356	.269	.605	.002	.081	
Intercept	Power	677.332	1	677.332	449.656	.000	.768	1.000
	Hedonism	3065.757	1	3065.757	1908.357	.000	.933	1.000
	Stimulation	2145.241	1	2145.241	1210.425	.000	.899	1.000
	Self-Direction	3292.048	1	3292.048	3091.670	.000	.958	1.000
	Universalism	2932.509	1	2932.509	2749.032	.000	.953	1.000
	Benevolence	3367.586	1	3367.586	3217.198	.000	.959	1.000
	Tradition	1438.635	1	1438.635	1175.167	.000	.896	1.000
	Conformity	2785.337	1	2785.337	2132.327	.000	.940	1.000
	Security	3036.963	1	3036.963	3060.636	.000	.957	1.000
Achievement	2781.458	1	2781.458	2101.327	.000	.939	1.000	

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Generation	Power	6.607	1	6.607	4.386	.038	.031	.548
	Hedonism	4.597	1	4.597	2.862	.093	.021	.390
	Stimulation	3.734	1	3.734	2.107	.149	.015	.302
	Self-Direction	1.393	1	1.393	1.308	.255	.010	.206
	Universalism	4.819E-02	1	4.819E-02	.045	.832	.000	.055
	Benevolence	.449	1	.449	.429	.514	.003	.100
	Tradition	6.173E-02	1	6.173E-02	.050	.823	.000	.056
	Conformity	.163	1	.163	.125	.724	.001	.064
	Security	1.860E-03	1	1.860E-03	.002	.966	.000	.050
Achievement	.356	1	.356	.269	.605	.002	.081	
Error	Power	204.861	136	1.506				
	Hedonism	218.483	136	1.606				
	Stimulation	241.033	136	1.772				
	Self-Direction	144.814	136	1.065				
	Universalism	145.077	136	1.067				
	Benevolence	142.357	136	1.047				
	Tradition	166.491	136	1.224				
	Conformity	177.649	136	1.306				
	Security	134.948	136	.992				
Achievement	180.019	136	1.324					
Total	Power	898.889	138					
	Hedonism	3313.000	138					
	Stimulation	2407.667	138					
	Self-Direction	3441.482	138					
	Universalism	3086.140	138					
	Benevolence	3517.225	138					
	Tradition	1608.942	138					
	Conformity	2970.063	138					
	Security	3182.430	138					
Achievement	2974.875	138						
Corrected Total	Power	211.469	137					
	Hedonism	223.080	137					
	Stimulation	244.767	137					
	Self-Direction	146.208	137					
	Universalism	145.125	137					
	Benevolence	142.806	137					
	Tradition	166.552	137					
	Conformity	177.812	137					
	Security	134.950	137					
Achievement	180.375	137						

a Computed using alpha = .05

Appendix T: Logistic Regressions of General Values Items that were Opposed to Respondents' Values

1) Social Power

	Value	Freq	Parameter Coding	
			(1)	(2)
LIFECYCL				
single- no kids	1.00	262	1.000	.000
married- no kids	2.00	301	.000	1.000
married or single- have kids	3.00	406	.000	.000
GEN				
Gen X	2.00	671	1.000	
Boomer	3.00	298	.000	
GENDER				
Male	1	316	1.000	
Female	2	653	.000	

Interactions:

INT_1 GENDER(1) by LIFECYCL(1)
 INT_2 GENDER(1) by LIFECYCL(2)
 INT_3 GEN(1) by GENDER(1)
 INT_4 GEN(1) by LIFECYCL(1)
 INT_5 GEN(1) by LIFECYCL(2)
 INT_6 GEN(1) by GENDER(1) by LIFECYCL(1)
 INT_7 GEN(1) by GENDER(1) by LIFECYCL(2)

Dependent Variable.. social power

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 1161.5342

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Estimation terminated at iteration number 5 because
 Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood	1142.015
Goodness of Fit	959.020
Cox & Snell - R ²	.020
Nagelkerke - R ²	.029

	Chi-Square	df	Significance
Model	19.520	11	.0524
Block	19.520	11	.0524
Step	19.520	11	.0524

Classification Table for Social Power
The Cut Value is .50

Observed		Predicted		Percent Correct
		Agreement A	Opposed O	
Agreement	A	691	0	100.00%
Opposed	O	278	0	.00%
Overall				71.31%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp (B)
GENDER(1)	-.2144	.3235	.4392	1	.5075	.0000	.8071
LIFECYCL			1.4508	2	.4841	.0000	
LIFECYCL(1)	.5147	.4495	1.3109	1	.2522	.0000	1.6731
LIFECYCL(2)	.2297	.3887	.3493	1	.5545	.0000	1.2583
GENDER * LIFECYCL			.7026	2	.7038	.0000	
INT_1	-5.8183	7.0521	.6807	1	.4093	.0000	.0030
INT_2	.0786	.6141	.0164	1	.8982	.0000	1.0817
GEN(1)	-.2507	.2681	.8740	1	.3498	.0000	.7783
INT_3	-.3251	.4797	.4592	1	.4980	.0000	.7225
GEN * LIFECYCL			.7816	2	.6765	.0000	
INT_4	-.4417	.5196	.7225	1	.3953	.0000	.6430
INT_5	-.2258	.4661	.2347	1	.6280	.0000	.7979
GEN * GENDER * LIFECYCL			.8335	2	.6592	.0000	
INT_6	6.0007	7.0689	.7206	1	.3959	.0000	403.7070
INT_7	.2907	.7838	.1376	1	.7107	.0000	1.3374
Constant	-.6817	.1850	13.5803	1	.0002		

2) Accepting My Portion in Life

	Value	Freq	Parameter Coding		
			(1)	(2)	(3)
GEN					
Echo	1.00	135	1.000	.000	.000
Gen X	2.00	666	.000	1.000	.000
Boomer	3.00	299	.000	.000	1.000
Mature	4.00	57	.000	.000	.000
LIFECYCL					
single- no kids	1.00	401	1.000	.000	
married- no kids	2.00	306	.000	1.000	
married or single- have kids	3.00	450	.000	.000	
GENDER					
Male		1	410	1.000	

Female 2 747 .000

Interactions:

INT_1 GENDER(1) by LIFECYCL(1)
 INT_2 GENDER(1) by LIFECYCL(2)
 INT_3 GEN(1) by GENDER(1)
 INT_4 GEN(2) by GENDER(1)
 INT_5 GEN(3) by GENDER(1)
 INT_6 GEN(1) by LIFECYCL(1)
 INT_7 GEN(1) by LIFECYCL(2)
 INT_8 GEN(2) by LIFECYCL(1)
 INT_9 GEN(2) by LIFECYCL(2)
 INT_10 GEN(3) by LIFECYCL(1)
 INT_11 GEN(3) by LIFECYCL(2)
 INT_12 GEN(1) by GENDER(1) by LIFECYCL(1)
 INT_13 GEN(1) by GENDER(1) by LIFECYCL(2)
 INT_14 GEN(2) by GENDER(1) by LIFECYCL(1)
 INT_15 GEN(2) by GENDER(1) by LIFECYCL(2)
 INT_16 GEN(3) by GENDER(1) by LIFECYCL(1)
 INT_17 GEN(3) by GENDER(1) by LIFECYCL(2)

Dependent Variable.. A34NEG accepting portion in life

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 708.68881

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number

1.. GENDER Gender
 LIFECYCL lifecycle stage
 GENDER * LIFECYCL
 GEN Generation
 GEN * GENDER
 GEN * LIFECYCL
 GEN * GENDER * LIFECYCL

Estimation terminated at iteration number 7 because Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 686.508
 Goodness of Fit 1125.009
 Cox & Snell - R² .019
 Nagelkerke - R² .041

	Chi-Square	df	Significance
Model	22.181	19	.2754
Block	22.181	19	.2754
Step	22.181	19	.2754

Classification Table for A34NEG
The Cut Value is .50

Observed		Predicted		Percent Correct
		agreement a	opposed o	
agreement	a	1051	0	100.00%
opposed	o	106	0	.00%
Overall				90.84%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
GENDER(1)	5.0244	13.5513	.1375	1	.7108	.0000	152.0801
LIFECYCL			.0000	2	1.0000	.0000	
LIFECYCL(1)	-2.0E-10	33.0995	.0000	1	1.0000	.0000	1.0000
LIFECYCL(2)	-1.5E-10	44.8169	.0000	1	1.0000	.0000	1.0000
GENDER * LIFECYCL			.0139	2	.9931	.0000	
INT_1	-5.0244	68.9097	.0053	1	.9419	.0000	.0066
INT_2	-5.0244	52.3449	.0092	1	.9235	.0000	.0066
GEN			.6150	3	.8930	.0000	
GEN(1)	4.6615	30.2241	.0238	1	.8774	.0000	105.7949
GEN(2)	5.9967	13.5160	.1968	1	.6573	.0000	402.1102
GEN(3)	5.7176	13.5168	.1789	1	.6723	.0000	304.1603
GEN * GENDER			.2060	3	.9766	.0000	
INT_3	1.2723	67.5692	.0004	1	.9850	.0000	3.5690
INT_4	-5.4577	13.5624	.1619	1	.6874	.0000	.0043
INT_5	-5.6305	13.5681	.1722	1	.6782	.0000	.0036
GEN * LIFECYCL			2.0388	4	.7286	.0000	
INT_8	.2229	33.1017	.0000	1	.9946	.0000	1.2497
INT_9	.2463	44.8185	.0000	1	.9956	.0000	1.2793
INT_10	1.0986	33.1049	.0011	1	.9735	.0000	3.0000
INT_11	.0572	44.8222	.0000	1	.9990	.0000	1.0588
GEN * GENDER * LIFECYCL			.2583	4	.9923	.0000	
INT_14	5.0892	68.9136	.0055	1	.9411	.0000	162.2550
INT_15	5.4712	52.3496	.0109	1	.9168	.0000	237.7556
INT_16	4.8196	68.9229	.0049	1	.9443	.0000	123.9171
INT_17	5.9380	52.3563	.0129	1	.9097	.0000	379.1865
Constant	-8.2025	13.5128	.3685	1	.5438		

Appendix U: SPSS Output for MANOVA 1 – Work Values (All Generations)

Between-Subjects Factors

		Value Label	N
Gender	1	Male	358
	2	Female	627
Generation	1.00	Echo	103
	2.00	Gen X	583
	3.00	Boomer	245
	4.00	Mature	54

Multivariate Tests (Work Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.954	3354.880	6.000	972.000	.000	.954	1.000
	Wilks' Lambda	.046	3354.880	6.000	972.000	.000	.954	1.000
	Hotelling's Trace	20.709	3354.880	6.000	972.000	.000	.954	1.000
	Roy's Largest Root	20.709	3354.880	6.000	972.000	.000	.954	1.000
Gender	Pillai's Trace	.039	6.611	6.000	972.000	.000	.039	.999
	Wilks' Lambda	.961	6.611	6.000	972.000	.000	.039	.999
	Hotelling's Trace	.041	6.611	6.000	972.000	.000	.039	.999
	Roy's Largest Root	.041	6.611	6.000	972.000	.000	.039	.999
Generation	Pillai's Trace	.153	8.721	18.000	2922.000	.000	.051	1.000
	Wilks' Lambda	.851	8.946	18.000	2749.716	.000	.052	1.000
	Hotelling's Trace	.170	9.148	18.000	2912.000	.000	.054	1.000
	Roy's Largest Root	.133	21.522	6.000	974.000	.000	.117	1.000
Gender X Generation	Pillai's Trace	.014	.782	18.000	2922.000	.723	.005	.597
	Wilks' Lambda	.986	.783	18.000	2749.716	.723	.005	.564
	Hotelling's Trace	.015	.783	18.000	2912.000	.722	.005	.598
	Roy's Largest Root	.011	1.862	6.000	974.000	.084	.011	.698

a Computed using alpha = .05

Tests of Between-Subjects Effects (Work Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Intrinsic Work Values	49.324	7	7.046	7.689	.000	.052	1.000
	Compensation	8.091	7	1.156	.803	.585	.006	.351
	Work Status	63.043	7	9.006	5.798	.000	.040	.999
	Altruism	94.709	7	13.530	11.068	.000	.073	1.000
	Freedom at Work	26.836	7	3.834	2.724	.008	.019	.912
	Social Environment	65.108	7	9.301	4.588	.000	.032	.995
Intercept	Intrinsic Work Values	11406.152	1	11406.152	12447.129	.000	.927	1.000
	Compensation	12588.503	1	12588.503	8740.903	.000	.899	1.000
	Work Status	5644.495	1	5644.495	3633.967	.000	.788	1.000
	Altruism	11706.483	1	11706.483	9576.711	.000	.907	1.000
	Freedom at Work	10519.530	1	10519.530	7475.609	.000	.884	1.000

	Social Environment	9330.375	1	9330.375	4602.451	.000	.825	1.000
	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Gender	Intrinsic Work Values	13.651	1	13.651	14.897	.000	.015	.971
	Compensation	1.043	1	1.043	.724	.395	.001	.136
	Work Status	1.869	1	1.869	1.203	.273	.001	.195
	Altruism	27.602	1	27.602	22.580	.000	.023	.997
	Freedom at Work	3.944	1	3.944	2.803	.094	.003	.387
	Social Environment	3.456	1	3.456	1.705	.192	.002	.257
Generation	Intrinsic Work Values	6.951	3	2.317	2.529	.056	.008	.626
	Compensation	1.046	3	.349	.242	.867	.001	.096
	Work Status	55.987	3	18.662	12.015	.000	.036	1.000
	Altruism	43.031	3	14.344	11.734	.000	.035	1.000
	Freedom at Work	2.624	3	.875	.622	.601	.002	.181
	Social Environment	49.657	3	16.552	8.165	.000	.024	.992
Gender X Generation	Intrinsic Work Values	3.011	3	1.004	1.095	.350	.003	.298
	Compensation	1.452	3	.484	.336	.799	.001	.116
	Work Status	1.013	3	.338	.217	.884	.001	.091
	Altruism	.550	3	.183	.150	.930	.000	.078
	Freedom at Work	4.634	3	1.545	1.098	.349	.003	.298
	Social Environment	.712	3	.237	.117	.950	.000	.071
Error	Intrinsic Work Values	895.292	977	.916				
	Compensation	1407.059	977	1.440				
	Work Status	1517.535	977	1.553				
	Altruism	1194.276	977	1.222				
	Freedom at Work	1374.815	977	1.407				
	Social Environment	1980.635	977	2.027				
Total	Intrinsic Work Values	26672.813	985					
	Compensation	29078.500	985					
	Work Status	13125.998	985					
	Altruism	26403.056	985					
	Freedom at Work	24947.083	985					
	Social Environment	22519.688	985					
Corrected Total	Intrinsic Work Values	944.615	984					
	Compensation	1415.150	984					
	Work Status	1580.578	984					
	Altruism	1288.984	984					
	Freedom at Work	1401.651	984					
	Social Environment at Work	2045.743	984					

a Computed using alpha = .05

Multiple Comparisons Scheffe (p<.05)

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Intrinsic Work Values	Echo	Gen X	-.3458	.1023	.005
		Boomer	-.1978	.1124	.473
		Mature	-.1483	.1608	1.000
	Gen X	Echo	.3458	.1023	.005
		Boomer	.1480	7.288E-02	.255
		Mature	.1975	.1362	.883
	Boomer	Echo	.1978	.1124	.473
		Gen X	-.1480	7.288E-02	.255
		Mature	4.950E-02	.1439	1.000
	Mature	Echo	.1483	.1608	1.000
		Gen X	-.1975	.1362	.883
		Boomer	-4.9500E-02	.1439	1.000
Compensation	Echo	Gen X	-9.4526E-02	.1283	1.000
		Boomer	-4.3854E-03	.1409	1.000
		Mature	6.386E-02	.2016	1.000
	Gen X	Echo	9.453E-02	.1283	1.000
		Boomer	9.014E-02	9.137E-02	1.000
		Mature	.1584	.1707	1.000
	Boomer	Echo	4.385E-03	.1409	1.000
		Gen X	-9.0140E-02	9.137E-02	1.000
		Mature	6.824E-02	.1804	1.000
	Mature	Echo	-6.3856E-02	.2016	1.000
		Gen X	-.1584	.1707	1.000
		Boomer	-6.8241E-02	.1804	1.000
Work Status	Echo	Gen X	.5915	.1332	.000
		Boomer	.8955	.1464	.000
		Mature	.5963	.2094	.027
	Gen X	Echo	-.5915	.1332	.000
		Boomer	.3040	9.489E-02	.008
		Mature	4.780E-03	.1773	1.000
	Boomer	Echo	-.8955	.1464	.000
		Gen X	-.3040	9.489E-02	.008
		Mature	-.2992	.1874	.664
	Mature	Echo	-.5963	.2094	.027
		Gen X	-4.7797E-03	.1773	1.000
		Boomer	.2992	.1874	.664
Altruism	Echo	Gen X	-.4157	.1182	.003
		Boomer	-.6119	.1298	.000
		Mature	-.9275	.1858	.000
	Gen X	Echo	.4157	.1182	.003
		Boomer	-.1962	8.418E-02	.120
		Mature	-.5118	.1573	.007
	Boomer	Echo	.6119	.1298	.000
		Gen X	.1962	8.418E-02	.120
		Mature	-.3155	.1662	.348
	Mature	Echo	.9275	.1858	.000
		Gen X	.5118	.1573	.007
		Boomer	.3155	.1662	.348

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Freedom at Work	Echo	Gen X	-.2257	.1268	.452
		Boomer	-.1348	.1393	1.000
		Mature	-6.7122E-03	.1993	1.000
	Gen X	Echo	.2257	.1268	.452
		Boomer	9.094E-02	9.032E-02	1.000
		Mature	.2190	.1687	1.000
	Boomer	Echo	.1348	.1393	1.000
		Gen X	-9.0936E-02	9.032E-02	1.000
		Mature	.1281	.1783	1.000
	Mature	Echo	6.712E-03	.1993	1.000
		Gen X	-.2190	.1687	1.000
		Boomer	-.1281	.1783	1.000
Social Environment at Work	Echo	Gen X	.3811	.1522	.075
		Boomer	.7598	.1672	.000
		Mature	.7901	.2392	.006
	Gen X	Echo	-.3811	.1522	.075
		Boomer	.3788	.1084	.003
		Mature	.4091	.2025	.262
	Boomer	Echo	-.7598	.1672	.000
		Gen X	-.3788	.1084	.003
		Mature	3.029E-02	.2140	1.000
	Mature	Echo	-.7901	.2392	.006
		Gen X	-.4091	.2025	.262
		Boomer	-3.0291E-02	.2140	1.000

Based on observed means.

* The mean difference is significant at the .05 level.

Appendix V: SPSS Output for MANOVA 2 – Work Values (Baby Boomers and Generation Xers)

Between-Subjects Factors

		Value Label	N
Gender	1	Male	280
	2	Female	548
Generation	2.00	Gen X	583
	3.00	Boomer	245
lifecycle stage	1.00	single- no kids	226
	2.00	married- no kids	262
	3.00	married or single- have kids	340

Multivariate Tests (Work Values)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.961	3329.373	6.000	811.000	.000	.961	1.000
	Wilks' Lambda	.039	3329.373	6.000	811.000	.000	.961	1.000
	Hotelling's Trace	24.632	3329.373	6.000	811.000	.000	.961	1.000
	Roy's Largest Root	24.632	3329.373	6.000	811.000	.000	.961	1.000
Gender	Pillai's Trace	.046	6.539	6.000	811.000	.000	.046	.999
	Wilks' Lambda	.954	6.539	6.000	811.000	.000	.046	.999
	Hotelling's Trace	.048	6.539	6.000	811.000	.000	.046	.999
	Roy's Largest Root	.048	6.539	6.000	811.000	.000	.046	.999
Generation	Pillai's Trace	.034	4.725	6.000	811.000	.000	.034	.990
	Wilks' Lambda	.966	4.725	6.000	811.000	.000	.034	.990
	Hotelling's Trace	.035	4.725	6.000	811.000	.000	.034	.990
	Roy's Largest Root	.035	4.725	6.000	811.000	.000	.034	.990
Lifecycle	Pillai's Trace	.022	1.531	12.000	1624.000	.106	.011	.825
	Wilks' Lambda	.978	1.533	12.000	1622.000	.105	.011	.826
	Hotelling's Trace	.023	1.536	12.000	1620.000	.105	.011	.826
	Roy's Largest Root	.019	2.604	6.000	812.000	.017	.019	.857
Gender X Generation	Pillai's Trace	.013	1.789	6.000	811.000	.098	.013	.677
	Wilks' Lambda	.987	1.789	6.000	811.000	.098	.013	.677
	Hotelling's Trace	.013	1.789	6.000	811.000	.098	.013	.677
	Roy's Largest Root	.013	1.789	6.000	811.000	.098	.013	.677
Gender X Lifecycle	Pillai's Trace	.006	.412	12.000	1624.000	.960	.003	.241
	Wilks' Lambda	.994	.411	12.000	1622.000	.960	.003	.241
	Hotelling's Trace	.006	.411	12.000	1620.000	.960	.003	.241
	Roy's Largest Root	.005	.707	6.000	812.000	.644	.005	.284
Generation X Lifecycle	Pillai's Trace	.017	1.187	12.000	1624.000	.286	.009	.692
	Wilks' Lambda	.983	1.187	12.000	1622.000	.286	.009	.692
	Hotelling's Trace	.018	1.187	12.000	1620.000	.287	.009	.692
	Roy's Largest Root	.013	1.782	6.000	812.000	.100	.013	.675
Gender X Generation X Lifecycle	Pillai's Trace	.015	.995	12.000	1624.000	.451	.007	.595
	Wilks' Lambda	.985	.995	12.000	1622.000	.451	.007	.595
	Hotelling's Trace	.015	.995	12.000	1620.000	.451	.007	.595
	Roy's Largest Root	.011	1.525	6.000	812.000	.167	.011	.594

a Computed using alpha = .05

Tests of Between-Subjects Effects (Work Values)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Intrinsic Work Values	53.944	11	4.904	5.524	.000	.069	1.000
	Compensation	13.199	11	1.200	.829	.611	.011	.472
	Work Status	50.817	11	4.620	3.130	.000	.040	.991
	Altruism	64.716	11	5.883	4.812	.000	.061	1.000
	Freedom at Work	39.212	11	3.565	2.558	.003	.033	.970
	Social Environment	64.525	11	5.866	2.845	.001	.037	.984
Intercept	Intrinsic Work Values	11135.407	1	11135.407	12544.219	.000	.939	1.000
	Compensation	11972.010	1	11972.010	8275.742	.000	.910	1.000
	Work Status	4638.517	1	4638.517	3143.169	.000	.794	1.000
	Altruism	11085.244	1	11085.244	9066.042	.000	.917	1.000
	Freedom at Work	10081.099	1	10081.099	7234.821	.000	.899	1.000
	Social Environment	8581.194	1	8581.194	4161.959	.000	.836	1.000
Gender	Intrinsic Work Values	11.263	1	11.263	12.688	.000	.015	.945
	Compensation	.542	1	.542	.375	.541	.000	.094
	Work Status	2.955	1	2.955	2.002	.157	.002	.293
	Altruism	27.052	1	27.052	22.124	.000	.026	.997
	Freedom at Work	2.164	1	2.164	1.553	.213	.002	.238
	Social Environment	2.039	1	2.039	.989	.320	.001	.168
Generation	Intrinsic Work Values	.614	1	.614	.692	.406	.001	.132
	Compensation	1.344	1	1.344	.929	.335	.001	.161
	Work Status	15.482	1	15.482	10.491	.001	.013	.899
	Altruism	6.903	1	6.903	5.645	.018	.007	.660
	Freedom at Work	1.373	1	1.373	.985	.321	.001	.168
	Social Environment	7.516	1	7.516	3.645	.057	.004	.479
Lifecycle	Intrinsic Work Values	4.038	2	2.019	2.274	.104	.006	.463
	Compensation	.763	2	.381	.264	.768	.001	.092
	Work Status	1.363	2	.682	.462	.630	.001	.126
	Altruism	1.824	2	.912	.746	.475	.002	.177
	Freedom at Work	5.566	2	2.783	1.997	.136	.005	.414
	Social Environment	8.516	2	4.258	2.065	.127	.005	.426
Gender X Generation	Intrinsic Work Values	1.425	1	1.425	1.606	.205	.002	.244
	Compensation	1.907	1	1.907	1.318	.251	.002	.209
	Work Status	1.497E-02	1	1.497E-02	.010	.920	.000	.051
	Altruism	8.824E-02	1	8.824E-02	.072	.788	.000	.058
	Freedom at Work	7.518	1	7.518	5.395	.020	.007	.641
	Social Environment	1.140	1	1.140	.553	.457	.001	.115

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Gender X Lifecycle	Intrinsic Work Values	.433	2	.217	.244	.784	.001	.088
	Compensation	1.809	2	.904	.625	.535	.002	.155
	Work Status	.533	2	.267	.181	.835	.000	.078
	Altruism	4.858E-02	2	2.429E-02	.020	.980	.000	.053
	Freedom at Work	4.005	2	2.003	1.437	.238	.004	.308
	Social Environment	.440	2	.220	.107	.899	.000	.066
Generation X Lifecycle	Intrinsic Work Values	3.197	2	1.598	1.801	.166	.004	.377
	Compensation	2.541	2	1.270	.878	.416	.002	.202
	Work Status	10.610	2	5.305	3.595	.028	.009	.666
	Altruism	2.213	2	1.107	.905	.405	.002	.207
	Freedom at Work	.193	2	9.671E-02	.069	.933	.000	.061
	Social Environment	.445	2	.222	.108	.898	.000	.067
Gender X Generation X Lifecycle	Intrinsic Work Values	2.571	2	1.286	1.448	.236	.004	.311
	Compensation	.506	2	.253	.175	.839	.000	.077
	Work Status	1.458	2	.729	.494	.610	.001	.131
	Altruism	2.208	2	1.104	.903	.406	.002	.206
	Freedom at Work	5.030	2	2.515	1.805	.165	.004	.378
	Social Environment	6.781	2	3.391	1.644	.194	.004	.348
Error	Intrinsic Work Values	724.357	816	.888				
	Compensation	1180.457	816	1.447				
	Work Status	1204.208	816	1.476				
	Altruism	997.741	816	1.223				
	Freedom at Work	1137.026	816	1.393				
	Social Environment	1682.442	816	2.062				
Total	Intrinsic Work Values	22745.597	828					
	Compensation	24573.528	828					
	Work Status	10534.530	828					
	Altruism	22380.333	828					
	Freedom at Work	21223.139	828					
	Social Environment	18692.188	828					
Corrected Total	Intrinsic Work Values	778.301	827					
	Compensation	1193.657	827					
	Work Status	1255.026	827					
	Altruism	1062.457	827					
	Freedom at Work	1176.238	827					
	Social Environment	1746.966	827					

a Computed using alpha = .05

Appendix W: Logistic Regressions of Work Values Items that were Opposed to Respondents' Values

1) Authority

	Value	Freq	Parameter Coding		
			(1)	(2)	(3)
GEN					
Echo	1.00	125	1.000	.000	.000
Gen X	2.00	653	.000	1.000	.000
Boomer	3.00	276	.000	.000	1.000
Mature	4.00	57	.000	.000	.000
LIFECYCL					
single- no kids	1.00	390	1.000	.000	
married- no kids	2.00	298	.000	1.000	
married or single- have kids	3.00	423	.000	.000	
GENDER					
Male	1	403	1.000		
Female	2	708	.000		

Interactions:

INT_1 GENDER(1) by LIFECYCL(1)
 INT_2 GENDER(1) by LIFECYCL(2)
 INT_3 GEN(1) by GENDER(1)
 INT_4 GEN(2) by GENDER(1)
 INT_5 GEN(3) by GENDER(1)
 INT_6 GEN(1) by LIFECYCL(1)
 INT_7 GEN(1) by LIFECYCL(2)
 INT_8 GEN(2) by LIFECYCL(1)
 INT_9 GEN(2) by LIFECYCL(2)
 INT_10 GEN(3) by LIFECYCL(1)
 INT_11 GEN(3) by LIFECYCL(2)
 INT_12 GEN(1) by GENDER(1) by LIFECYCL(1)
 INT_13 GEN(1) by GENDER(1) by LIFECYCL(2)
 INT_14 GEN(2) by GENDER(1) by LIFECYCL(1)
 INT_15 GEN(2) by GENDER(1) by LIFECYCL(2)
 INT_16 GEN(3) by GENDER(1) by LIFECYCL(1)
 INT_17 GEN(3) by GENDER(1) by LIFECYCL(2)

Dependent Variable.. BC3NEG Authority

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 192.27912

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number

1.. GENDER Gender
 LIFECYCL lifecycle stage
 GENDER * LIFECYCL
 GEN Generation
 GEN * GENDER
 GEN * LIFECYCL
 GEN * GENDER * LIFECYCL

Estimation terminated at iteration number 10 because
Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood	171.624
Goodness of Fit	853.004
Cox & Snell - R ²	.018
Nagelkerke - R ²	.116

	Chi-Square	df	Significance
Model	20.655	19	.3562
Block	20.655	19	.3562
Step	20.655	19	.3562

Classification Table for BC3NEG
The Cut Value is .50

		Predicted		Percent Correct
		agreement a	opposed o	
Observed	agreement a	1092	0	100.00%
	opposed o	19	0	.00%
Overall				98.29%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
GENDER(1)	1.48E-10	81.2457	.0000	1	1.0000	.0000	1.0000
LIFECYCL			.0000	2	1.0000	.0000	
LIFECYCL(1)	-2.8E-10	148.3336	.0000	1	1.0000	.0000	1.0000
LIFECYCL(2)	1.45E-11	200.8447	.0000	1	1.0000	.0000	1.0000
GENDER * LIFECYCL			.0000	2	1.0000	.0000	
INT_1	4.21E-10	313.4955	.0000	1	1.0000	.0000	1.0000
INT_2	-9.5E-12	240.7091	.0000	1	1.0000	.0000	1.0000
GEN			.0176	3	.9994	.0000	
GEN(1)	7.7529	135.4113	.0033	1	.9543	.0000	2328.2813
GEN(2)	6.4071	60.5653	.0112	1	.9158	.0000	606.1228
GEN(3)	6.4844	60.5653	.0115	1	.9147	.0000	654.8291
GEN * GENDER			.3608	3	.9482	.0000	
INT_3	.0827	302.7864	.0000	1	1.0000	.0000	1.0862
INT_4	1.6177	81.2540	.0004	1	.9841	.0000	5.0417
INT_5	.5138	81.2581	.0000	1	.9950	.0000	1.6716
GEN * LIFECYCL			1.8389	4	.7654	.0000	
INT_8	.4391	148.3387	.0000	1	.9976	.0000	1.5513
INT_9	1.0883	200.8478	.0000	1	.9957	.0000	2.9693
INT_10	2.7261	148.3383	.0003	1	.9853	.0000	15.2727
INT_11	-6.4844	206.4741	.0010	1	.9749	.0000	.0015
GEN * GENDER * LIFECYCL			.0140	4	1.0000	.0000	
INT_14	-8.4639	315.2395	.0007	1	.9786	.0000	.0002
INT_15	-9.1132	243.0812	.0014	1	.9701	.0000	.0001
INT_16	-9.7242	324.9863	.0009	1	.9761	.0000	.0001
INT_17	-.5138	250.7075	.0000	1	.9984	.0000	.5982
Constant	-11.2029	60.5569	.0342	1	.8532		

2) Work Alone

	Value	Freq	Parameter Coding		
			(1)	(2)	(3)
GEN					
Echo	1.00	123	1.000	.000	.000
Gen X	2.00	648	.000	1.000	.000
Boomer	3.00	277	.000	.000	1.000
Mature	4.00	56	.000	.000	.000
LIFECYCL					
single- no kids	1.00	383	1.000	.000	
married- no kids	2.00	299	.000	1.000	
married or single- have kids	3.00	422	.000	.000	
GENDER					
Male	1	400	1.000		
Female	2	704	.000		

Interactions:

INT_1 GENDER(1) by LIFECYCL(1)
 INT_2 GENDER(1) by LIFECYCL(2)
 INT_3 GEN(1) by GENDER(1)
 INT_4 GEN(2) by GENDER(1)
 INT_5 GEN(3) by GENDER(1)
 INT_6 GEN(1) by LIFECYCL(1)
 INT_7 GEN(1) by LIFECYCL(2)
 INT_8 GEN(2) by LIFECYCL(1)
 INT_9 GEN(2) by LIFECYCL(2)
 INT_10 GEN(3) by LIFECYCL(1)
 INT_11 GEN(3) by LIFECYCL(2)
 INT_12 GEN(1) by GENDER(1) by LIFECYCL(1)
 INT_13 GEN(1) by GENDER(1) by LIFECYCL(2)
 INT_14 GEN(2) by GENDER(1) by LIFECYCL(1)
 INT_15 GEN(2) by GENDER(1) by LIFECYCL(2)
 INT_16 GEN(3) by GENDER(1) by LIFECYCL(1)
 INT_17 GEN(3) by GENDER(1) by LIFECYCL(2)

Dependent Variable.. BC15NEG Work Alone

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 289.68477

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number

1.. GENDER Gender
 LIFECYCL lifecycle stage
 GENDER * LIFECYCL
 GEN Generation
 GEN * GENDER
 GEN * LIFECYCL
 GEN * GENDER * LIFECYCL

Estimation terminated at iteration number 10 because Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 265.778
 Goodness of Fit 874.003
 Cox & Snell - R² .021
 Nagelkerke - R² .093

	Chi-Square	df	Significance
Model	23.906	19	.1998
Block	23.906	19	.1998
Step	23.906	19	.1998

Classification Table for BC15NEG
 The Cut Value is .50

		Predicted		Percent Correct
		agreement	opposed	
		a	o	
Observed				
agreement	a	1071	1	99.91%
opposed	o	31	1	3.13%
Overall				97.10%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
GENDER(1)	3.39E-10	82.4249	.0000	1	1.0000	.0000	1.0000
LIFECYCL			.0393	2	.9805	.0000	
LIFECYCL(1)	2.05E-10	148.9828	.0000	1	1.0000	.0000	1.0000
LIFECYCL(2)	11.2029	62.1462	.0325	1	.8569	.0000	73340.863
GENDER * LIFECYCL			.0060	2	.9970	.0000	
INT_1	-5.2E-10	313.8032	.0000	1	1.0000	.0000	1.0000
INT_2	-11.2029	146.5075	.0058	1	.9390	.0000	.0000
GEN			1.9346	3	.5861	.0000	
GEN(1)	7.7851	135.4113	.0033	1	.9542	.0000	2404.6184
GEN(2)	7.5224	62.1329	.0147	1	.9036	.0000	1848.9293
GEN(3)	8.4948	62.1313	.0187	1	.8912	.0000	4889.3908
GEN * GENDER			.0761	3	.9945	.0000	
INT_3	.4733	302.7861	.0000	1	.9988	.0000	1.6053
INT_4	.5025	82.4291	.0000	1	.9951	.0000	1.6528
INT_5	-8.4948	88.6395	.0092	1	.9237	.0000	.0002
GEN * LIFECYCL			.5792	4	.9654	.0000	
INT_8	.4616	148.9845	.0000	1	.9975	.0000	1.5867
INT_9	-11.5297	62.1517	.0344	1	.8528	.0000	.0000
INT_10	-.4700	148.9868	.0000	1	.9975	.0000	.6250
INT_11	-19.6977	78.0052	.0638	1	.8006	.0000	.0000
GEN * GENDER * LIFECYCL			.0897	4	.9990	.0000	
INT_14	-8.4865	315.6252	.0007	1	.9785	.0000	.0002
INT_15	11.2900	146.5127	.0059	1	.9386	.0000	80019.236
INT_16	.4700	326.9111	.0000	1	.9989	.0000	1.6000
INT_17	27.6047	157.3248	.0308	1	.8607	.0000	9.741E+11
Constant	-11.2029	62.1301	.0325	1	.8569		

3) Prestigious Work

	Value	Freq	Parameter Coding		
			(1)	(2)	(3)
GEN					
Echo	1.00	124	1.000	.000	.000
Gen X	2.00	645	.000	1.000	.000
Boomer	3.00	277	.000	.000	1.000
Mature	4.00	57	.000	.000	.000
LIFECYCL					
single- no kids	1.00	384	1.000	.000	
married- no kids	2.00	298	.000	1.000	
married or single- have kids	3.00	421	.000	.000	
GENDER					
Male	1	399	1.000		
Female	2	704	.000		

Interactions:

INT_1 GENDER(1) by LIFECYCL(1)
 INT_2 GENDER(1) by LIFECYCL(2)
 INT_3 GEN(1) by GENDER(1)
 INT_4 GEN(2) by GENDER(1)
 INT_5 GEN(3) by GENDER(1)
 INT_6 GEN(1) by LIFECYCL(1)
 INT_7 GEN(1) by LIFECYCL(2)
 INT_8 GEN(2) by LIFECYCL(1)
 INT_9 GEN(2) by LIFECYCL(2)
 INT_10 GEN(3) by LIFECYCL(1)
 INT_11 GEN(3) by LIFECYCL(2)
 INT_12 GEN(1) by GENDER(1) by LIFECYCL(1)
 INT_13 GEN(1) by GENDER(1) by LIFECYCL(2)
 INT_14 GEN(2) by GENDER(1) by LIFECYCL(1)
 INT_15 GEN(2) by GENDER(1) by LIFECYCL(2)
 INT_16 GEN(3) by GENDER(1) by LIFECYCL(1)
 INT_17 GEN(3) by GENDER(1) by LIFECYCL(2)

Dependent Variable.. BC26NEG Prestigious

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 246.26226

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number
 1.. GENDER Gender
 LIFECYCL lifecycle stage
 GENDER * LIFECYCL
 GEN Generation
 GEN * GENDER
 GEN * LIFECYCL
 GEN * GENDER * LIFECYCL

Estimation terminated at iteration number 10 because
 Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 220.777
 Goodness of Fit 824.004
 Cox & Snell - R² .023
 Nagelkerke - R² .114

	Chi-Square	df	Significance
Model	25.485	19	.1452
Block	25.485	19	.1452
Step	25.485	19	.1452

Classification Table for BC26NEG
 The Cut Value is .50

Observed		Predicted		Percent Correct
		agreement a	opposed o	
agreement	a	1077	0	100.00%
opposed	o	26	0	.00%
Overall				97.64%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
GENDER(1)	5.47E-11	81.2457	.0000	1	1.0000	.0000	1.0000
LIFECYCL			.0306	2	.9848	.0000	
LIFECYCL(1)	10.1043	60.5679	.0278	1	.8675	.0000	24446.954
LIFECYCL(2)	8.76E-11	200.8447	.0000	1	1.0000	.0000	1.0000
GENDER * LIFECYCL			.0013	2	.9994	.0000	
INT_1	-10.1043	282.7456	.0013	1	.9715	.0000	.0000
INT_2	-9.8E-11	240.7091	.0000	1	1.0000	.0000	1.0000
GEN			3.9657	3	.2652	.0000	
GEN(1)	-3.0445	1.5327	3.9456	1	.0470	-.0889	.0476
GEN(2)	7.1169	60.5611	.0138	1	.9065	.0000	1232.6195
GEN(3)	7.1955	60.5611	.0141	1	.9054	.0000	1333.4702
GEN * GENDER			.0913	3	.9929	.0000	
INT_3	3.0445	273.0707	.0001	1	.9911	.0000	21.0000
INT_4	.5025	81.2520	.0000	1	.9951	.0000	1.6528
INT_5	.9163	81.2509	.0001	1	.9910	.0000	2.5000
GEN * LIFECYCL			.1962	4	.9955	.0000	
INT_8	-17.2212	64.3361	.0716	1	.7889	.0000	.0000
INT_9	1.0965	200.8462	.0000	1	.9956	.0000	2.9937

INT_10	-8.5393	60.5766	.0199	1	.8879	.0000	.0002
INT_11	1.2665	200.8472	.0000	1	.9950	.0000	3.5484
GEN * GENDER * LIFECYCL			.0435	4	.9998	.0000	
INT_14	16.6615	283.5793	.0035	1	.9531	.0000	17219310
INT_15	-1.6401	240.7136	.0000	1	.9946	.0000	.1940
INT_16	.4274	295.4331	.0000	1	.9988	.0000	1.5333
INT_17	-1.4713	240.7141	.0000	1	.9951	.0000	.2296
Constant	-11.2029	60.5569	.0342	1	.8532		

3) Travel

	Value	Freq	Parameter Coding		
			(1)	(2)	(3)
GEN					
Echo	1.00	124	1.000	.000	.000
Gen X	2.00	645	.000	1.000	.000
Boomer	3.00	277	.000	.000	1.000
Mature	4.00	57	.000	.000	.000
LIFECYCL					
single- no kids	1.00	384	1.000	.000	
married- no kids	2.00	298	.000	1.000	
married or single- have kids	3.00	421	.000	.000	
GENDER					
Male	1	399	1.000		
Female	2	704	.000		

Interactions:

INT_1 GENDER(1) by LIFECYCL(1)
 INT_2 GENDER(1) by LIFECYCL(2)
 INT_3 GEN(1) by GENDER(1)
 INT_4 GEN(2) by GENDER(1)
 INT_5 GEN(3) by GENDER(1)
 INT_6 GEN(1) by LIFECYCL(1)
 INT_7 GEN(1) by LIFECYCL(2)
 INT_8 GEN(2) by LIFECYCL(1)
 INT_9 GEN(2) by LIFECYCL(2)
 INT_10 GEN(3) by LIFECYCL(1)
 INT_11 GEN(3) by LIFECYCL(2)
 INT_12 GEN(1) by GENDER(1) by LIFECYCL(1)
 INT_13 GEN(1) by GENDER(1) by LIFECYCL(2)
 INT_14 GEN(2) by GENDER(1) by LIFECYCL(1)
 INT_15 GEN(2) by GENDER(1) by LIFECYCL(2)
 INT_16 GEN(3) by GENDER(1) by LIFECYCL(1)
 INT_17 GEN(3) by GENDER(1) by LIFECYCL(2)

Dependent Variable.. BC26NEG Prestigious

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 246.26226

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number
 1.. GENDER Gender
 LIFECYCL lifecycle stage
 GENDER * LIFECYCL
 GEN Generation
 GEN * GENDER
 GEN * LIFECYCL
 GEN * GENDER * LIFECYCL

Estimation terminated at iteration number 10 because
 Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 220.777
 Goodness of Fit 824.004
 Cox & Snell - R² .023
 Nagelkerke - R² .114

	Chi-Square	df	Significance
Model	25.485	19	.1452
Block	25.485	19	.1452
Step	25.485	19	.1452

Classification Table for BC26NEG
 The Cut Value is .50

Observed		Predicted		Percent Correct
		agreement a	opposed o	
agreement	a	1077	0	100.00%
opposed	o	26	0	.00%
Overall				97.64%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp (B)
GENDER(1)	5.47E-11	81.2457	.0000	1	1.0000	.0000	1.0000
LIFECYCL			.0306	2	.9848	.0000	
LIFECYCL(1)	10.1043	60.5679	.0278	1	.8675	.0000	24446.954
LIFECYCL(2)	8.76E-11	200.8447	.0000	1	1.0000	.0000	1.0000
GENDER * LIFECYCL			.0013	2	.9994	.0000	
INT_1	-10.1043	282.7456	.0013	1	.9715	.0000	.0000
INT_2	-9.8E-11	240.7091	.0000	1	1.0000	.0000	1.0000
GEN			3.9657	3	.2652	.0000	
GEN(1)	-3.0445	1.5327	3.9456	1	.0470	-.0889	.0476
GEN(2)	7.1169	60.5611	.0138	1	.9065	.0000	1232.6195
GEN(3)	7.1955	60.5611	.0141	1	.9054	.0000	1333.4702
GEN * GENDER			.0913	3	.9929	.0000	
INT_3	3.0445	273.0707	.0001	1	.9911	.0000	21.0000
INT_4	.5025	81.2520	.0000	1	.9951	.0000	1.6528
INT_5	.9163	81.2509	.0001	1	.9910	.0000	2.5000
GEN * LIFECYCL			.1962	4	.9955	.0000	
INT_8	-17.2212	64.3361	.0716	1	.7889	.0000	.0000

INT_9	1.0965	200.8462	.0000	1	.9956	.0000	2.9937
INT_10	-8.5393	60.5766	.0199	1	.8879	.0000	.0002
INT_11	1.2665	200.8472	.0000	1	.9950	.0000	3.5484
GEN * GENDER * LIFECYCL			.0435	4	.9998	.0000	
INT_14	16.6615	283.5793	.0035	1	.9531	.0000	17219310
INT_15	-1.6401	240.7136	.0000	1	.9946	.0000	.1940
INT_16	.4274	295.4331	.0000	1	.9988	.0000	1.5333
INT_17	-1.4713	240.7141	.0000	1	.9951	.0000	.2296
Constant	-11.2029	60.5569	.0342	1	.8532		

Appendix X: SPSS Output for MANOVA 1 – Protestant Work Ethic (All Generations)

Between-Subjects Factors

		Value Label	N
Gender	1	Male	351
	2	Female	623
Generation	1.00	Echo	115
	2.00	Gen X	577
	3.00	Boomer	244
	4.00	Mature	38

Multivariate Tests (Protestant Work Ethic)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.912	2498.582	4.000	963.000	.000	.912	1.000
	Wilks' Lambda	.088	2498.582	4.000	963.000	.000	.912	1.000
	Hotelling's Trace	10.378	2498.582	4.000	963.000	.000	.912	1.000
	Roy's Largest Root	10.378	2498.582	4.000	963.000	.000	.912	1.000
Gender	Pillai's Trace	.004	.945	4.000	963.000	.437	.004	.302
	Wilks' Lambda	.996	.945	4.000	963.000	.437	.004	.302
	Hotelling's Trace	.004	.945	4.000	963.000	.437	.004	.302
	Roy's Largest Root	.004	.945	4.000	963.000	.437	.004	.302
Generation	Pillai's Trace	.074	6.120	12.000	2895.000	.000	.025	1.000
	Wilks' Lambda	.927	6.168	12.000	2548.150	.000	.025	1.000
	Hotelling's Trace	.077	6.198	12.000	2885.000	.000	.025	1.000
	Roy's Largest Root	.053	12.847	4.000	965.000	.000	.051	1.000
Gender X Generation	Pillai's Trace	.012	.981	12.000	2895.000	.464	.004	.589
	Wilks' Lambda	.988	.981	12.000	2548.150	.464	.004	.522
	Hotelling's Trace	.012	.980	12.000	2885.000	.465	.004	.588
	Roy's Largest Root	.008	1.885	4.000	965.000	.111	.008	.573

a Computed using alpha = .05

Tests of Between-Subjects Effects (Protestant Work Ethic)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Anti-Leisure	39.047	7	5.578	4.997	.000	.035	.997
	Asceticism	33.362	7	4.766	3.224	.002	.023	.955
	Hard Work	7.995	7	1.142	1.192	.305	.009	.518
	Independence	38.507	7	5.501	4.200	.000	.030	.990
Intercept	Anti-Leisure	1479.387	1	1479.387	1325.167	.000	.578	1.000
	Asceticism	2644.492	1	2644.492	1788.615	.000	.649	1.000
	Hard Work	6262.175	1	6262.175	6533.099	.000	.871	1.000
	Independence	2092.952	1	2092.952	1598.061	.000	.623	1.000
GENDER	Anti-Leisure	.637	1	.637	.571	.450	.001	.117
	Asceticism	.268	1	.268	.182	.670	.000	.071
	Hard Work	.230	1	.230	.240	.624	.000	.078
	Independence	3.604	1	3.604	2.752	.097	.003	.381

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
GEN	Anti-Leisure	34.171	3	11.390	10.203	.000	.031	.999
	Asceticism	28.326	3	9.442	6.386	.000	.019	.969
	Hard Work	5.714	3	1.905	1.987	.114	.006	.513
	Independence	16.736	3	5.579	4.259	.005	.013	.863
GENDER * GEN	Anti-Leisure	4.041	3	1.347	1.206	.306	.004	.325
	Asceticism	7.138	3	2.379	1.609	.186	.005	.425
	Hard Work	1.051	3	.350	.366	.778	.001	.122
	Independence	2.205	3	.735	.561	.641	.002	.167
Error	Anti-Leisure	1078.421	966	1.116				
	Asceticism	1428.245	966	1.479				
	Hard Work	925.940	966	.959				
	Independence	1265.153	966	1.310				
Total	Anti-Leisure	4191.444	974					
	Asceticism	8200.667	974					
	Hard Work	17718.889	974					
	Independence	6061.333	974					
Corrected Total	Anti-Leisure	1117.468	973					
	Asceticism	1461.607	973					
	Hard Work	933.936	973					
	Independence	1303.660	973					

a. Computed using alpha = .05

Multiple Comparisons Scheffe (p<.05)

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Anti-Leisure	Echo	Gen X	.3918	.1079	.004
		Boomer	.1425	.1195	.700
		Mature	-.3190	.1977	.457
	Gen X	Echo	-.3918	.1079	.004
		Boomer	-.2493	8.069E-02	.023
		Mature	-.7108	.1770	.001
	Boomer	Echo	-.1425	.1195	.700
		Gen X	.2493	8.069E-02	.023
		Mature	-.4615	.1843	.100
	Mature	Echo	.3190	.1977	.457
		Gen X	.7108	.1770	.001
		Boomer	.4615	.1843	.100
Asceticism	Echo	Gen X	-.3555	.1242	.043
		Boomer	-.5219	.1375	.003
		Mature	-.7216	.2275	.018
	Gen X	Echo	.3555	.1242	.043
		Boomer	-.1664	9.285E-02	.361
		Mature	-.3660	.2036	.358
	Boomer	Echo	.5219	.1375	.003
		Gen X	.1664	9.285E-02	.361
		Mature	-.1997	.2121	.829
	Mature	Echo	.7216	.2275	.018
		Gen X	.3660	.2036	.358
		Boomer	.1997	.2121	.829

Dependent Variable	(I) Generation	(J) Generation	Mean Difference (I-J)	Std. Error	Sig.
Hard Work	Echo	Gen X	5.095E-02	9.998E-02	.967
		Boomer	1.011E-02	.1107	1.000
		Mature	.4105	.1832	.171
	Gen X	Echo	-5.0953E-02	9.998E-02	.967
		Boomer	-4.0844E-02	7.476E-02	.960
		Mature	.3596	.1640	.187
	Boomer	Echo	-1.0109E-02	.1107	1.000
		Gen X	4.084E-02	7.476E-02	.960
		Mature	.4004	.1707	.139
	Mature	Echo	-.4105	.1832	.171
		Gen X	-.3596	.1640	.187
		Boomer	-.4004	.1707	.139
Independence	Echo	Gen X	.4607	.1169	.001
		Boomer	.3596	.1294	.053
		Mature	9.436E-02	.2141	.979
	Gen X	Echo	-.4607	.1169	.001
		Boomer	-.1011	8.739E-02	.720
		Mature	-.3663	.1917	.302
	Boomer	Echo	-.3596	.1294	.053
		Gen X	.1011	8.739E-02	.720
		Mature	-.2652	.1996	.622
	Mature	Echo	-9.4355E-02	.2141	.979
		Gen X	.3663	.1917	.302
		Boomer	.2652	.1996	.622

Based on observed means.

* The mean difference is significant at the .05 level.

Appendix Y: SPSS Output for MANOVA 2 – Protestant Work Ethic (Baby Boomers and Generation Xers)

Between-Subjects Factors

	Value Label	N
Gender	1 Male	277
	2 Female	544
Generation	2.00 Gen X	577
	3.00 Boomer	244
lifecycle stage	1.00 single- no kids	226
	2.00 married- no kids	263
	3.00 married or single- have kids	332

Multivariate Tests (Protestant Work Ethic)

Effect		Value	F	Hypothesis df	Error df	Sig.	Eta Squared	Observed Power ^a
Intercept	Pillai's Trace	.933	2813.631	4.000	806.000	.000	.933	1.000
	Wilks' Lambda	.067	2813.631	4.000	806.000	.000	.933	1.000
	Hotelling's Trace	13.963	2813.631	4.000	806.000	.000	.933	1.000
	Roy's Largest Root	13.963	2813.631	4.000	806.000	.000	.933	1.000
Gender	Pillai's Trace	.005	1.107	4.000	806.000	.352	.005	.351
	Wilks' Lambda	.995	1.107	4.000	806.000	.352	.005	.351
	Hotelling's Trace	.005	1.107	4.000	806.000	.352	.005	.351
	Roy's Largest Root	.005	1.107	4.000	806.000	.352	.005	.351
Generation	Pillai's Trace	.008	1.618	4.000	806.000	.168	.008	.501
	Wilks' Lambda	.992	1.618	4.000	806.000	.168	.008	.501
	Hotelling's Trace	.008	1.618	4.000	806.000	.168	.008	.501
	Roy's Largest Root	.008	1.618	4.000	806.000	.168	.008	.501
Lifecycle	Pillai's Trace	.015	1.573	8.000	1614.000	.128	.008	.707
	Wilks' Lambda	.985	1.572	8.000	1612.000	.128	.008	.707
	Hotelling's Trace	.016	1.571	8.000	1610.000	.129	.008	.707
	Roy's Largest Root	.011	2.145	4.000	807.000	.074	.011	.637
Gender X Generation	Pillai's Trace	.003	.692	4.000	806.000	.597	.003	.226
	Wilks' Lambda	.997	.692	4.000	806.000	.597	.003	.226
	Hotelling's Trace	.003	.692	4.000	806.000	.597	.003	.226
	Roy's Largest Root	.003	.692	4.000	806.000	.597	.003	.226
Gender X Lifecycle	Pillai's Trace	.008	.826	8.000	1614.000	.580	.004	.392
	Wilks' Lambda	.992	.825	8.000	1612.000	.581	.004	.391
	Hotelling's Trace	.008	.824	8.000	1610.000	.581	.004	.391
	Roy's Largest Root	.006	1.154	4.000	807.000	.330	.006	.365
Generation X Lifecycle	Pillai's Trace	.018	1.853	8.000	1614.000	.063	.009	.791
	Wilks' Lambda	.982	1.851	8.000	1612.000	.064	.009	.791
	Hotelling's Trace	.018	1.849	8.000	1610.000	.064	.009	.790
	Roy's Largest Root	.010	1.966	4.000	807.000	.098	.010	.593
Gender X Generation X Lifecycle	Pillai's Trace	.015	1.568	8.000	1614.000	.130	.008	.706
	Wilks' Lambda	.985	1.569	8.000	1612.000	.129	.008	.706
	Hotelling's Trace	.016	1.571	8.000	1610.000	.129	.008	.707
	Roy's Largest Root	.014	2.762	4.000	807.000	.027	.014	.762

a Computed using alpha = .05

Tests of Between-Subjects Effects (Protestant Work Ethic)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Observed Power ^a
Corrected Model	Anti-Leisure	29.054	11	2.641	2.380	.007	.031	.956
	Asceticism	33.729	11	3.066	2.025	.024	.027	.913
	Hard Work	16.033	11	1.458	1.506	.124	.020	.787
	Independence	24.992	11	2.272	1.748	.059	.023	.857
Intercept	Anti-Leisure	1312.856	1	1312.856	1183.203	.000	.594	1.000
	Asceticism	3130.553	1	3130.553	2067.173	.000	.719	1.000
	Hard Work	7429.973	1	7429.973	7676.984	.000	.905	1.000
	Independence	2118.597	1	2118.597	1630.394	.000	.668	1.000
Gender	Anti-Leisure	.606	1	.606	.546	.460	.001	.114
	Asceticism	.147	1	.147	.097	.755	.000	.061
	Hard Work	4.397E-02	1	4.397E-02	.045	.831	.000	.055
	Independence	4.554	1	4.554	3.505	.062	.004	.464
Generation	Anti-Leisure	4.531	1	4.531	4.083	.044	.005	.523
	Asceticism	1.758	1	1.758	1.161	.282	.001	.190
	Hard Work	.731	1	.731	.756	.385	.001	.140
	Independence	.623	1	.623	.479	.489	.001	.106
Lifecycle	Anti-Leisure	5.962	2	2.981	2.687	.069	.007	.533
	Asceticism	7.490	2	3.745	2.473	.085	.006	.497
	Hard Work	3.641	2	1.820	1.881	.153	.005	.392
	Independence	.281	2	.140	.108	.898	.000	.067
Gender X Generation	Anti-Leisure	1.248	1	1.248	1.124	.289	.001	.185
	Asceticism	5.601E-02	1	5.601E-02	.037	.848	.000	.054
	Hard Work	1.425	1	1.425	1.472	.225	.002	.228
	Independence	.584	1	.584	.450	.503	.001	.103
Gender X Lifecycle	Anti-Leisure	2.327	2	1.164	1.049	.351	.003	.234
	Asceticism	6.144	2	3.072	2.029	.132	.005	.419
	Hard Work	1.913E-02	2	9.563E-03	.010	.990	.000	.051
	Independence	1.784	2	.892	.686	.504	.002	.166
Generation X Lifecycle	Anti-Leisure	2.051	2	1.026	.924	.397	.002	.211
	Asceticism	6.126	2	3.063	2.023	.133	.005	.418
	Hard Work	4.094	2	2.047	2.115	.121	.005	.435
	Independence	5.284	2	2.642	2.033	.132	.005	.420
Gender X Generation X Lifecycle	Anti-Leisure	1.596	2	.798	.719	.487	.002	.172
	Asceticism	2.731	2	1.366	.902	.406	.002	.206
	Hard Work	6.864	2	3.432	3.546	.029	.009	.660
	Independence	2.478	2	1.239	.954	.386	.002	.216
Error	Anti-Leisure	897.649	809	1.110				
	Asceticism	1225.160	809	1.514				
	Hard Work	782.970	809	.968				
	Independence	1051.246	809	1.299				
Total	Anti-Leisure	3339.111	821					
	Asceticism	7093.556	821					
	Hard Work	15015.000	821					
	Independence	4857.778	821					
Corrected Total	Anti-Leisure	926.703	820					
	Asceticism	1258.888	820					
	Hard Work	799.003	820					
	Independence	1076.238	820					

a. Computed using alpha = .05